

MULTIMEDIA PROJECTOR

User's Manual



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Features of the Multimedia Projector SX6/SX60/X600

Thank you for purchasing a Canon projector.

The MULTIMEDIA PROJECTOR SX6/SX60/X600 are high-performance projectors which project the data from the computer and the moving picture from the DVD player to the big screen.

Major Features

Smooth and Beautiful Imaging Capability

Incorporation of AISYS, Canon's unique optical engine, and LCOS (Liquid Crystal On Silicon) achieves high brightness, high contrast ratio, and smooth and beautiful lattice-free images.

High Brightness of 3500 Lumen (SX6/X600)

This projector provides high brightness of the best-in-class* 3500 lumen. * Portable projectors less than 5 kg.

Super-Silent Operation of 27dB* (SX60)

This projector achieves super-silence operation as low as 27dB which creates a comfortable atmosphere where you can concentrate on watching a movie.

* At a silent mode.

Native SXGA+ Resolution (SX6/SX60)

Native SXGA+ resolution (1400 by 1050 dots) ensures projection of a high-quality image in a wider projection area with a high degree of resolution. * X600 supports native XGA resolution (1024 by 768 dots).

High-powered 1.7X Zoom Lens

 $1.7 \rm X$ zoom aspheric lens can project a 100-inch image when placed 3 m (9.8') to 4.9 m (16.0') away.

"Auto Setup Function" for Easy Installation

The "Auto Setup Function" allows you to install the projector easily by automatically adjusting focus and keystone distortion.

Adobe[®]RGB Color Space Compatibility (SX6)

AdobeRGB color space compatibility achieves faithful color reproduction.

"Home Cinema" Mode Reproducing the Atmosphere of a Movie Theater (SX60)

You can reproduce the atmosphere of a full-scale movie theater in your home by selecting "Home Cinema" from the image mode.

"Off and Go" Function Allowing the Carriage Immediately After the Use

You can carry the projector immediately after the use because the cooling fan keeps rotating even if the power cord is removed from the electrical outlet.

Compact and Easy-to-use Wireless Remote Control

It comes with a wireless remote control which allows you to control all functions of this projector.

Supplied Manuals and Symbols Used in This Manual

Supplied Manuals

User's Manual (This Document)

This is a universal manual for the projector, SX6/SX60/X600. This manual provides detailed information on how to use the projectors. Read this manual thoroughly to make the most of your projector and ensure safety.

Quick Start Guide (Another Document)

This guide shows an outline flowchart of the work necessary to start up, adjusting, and turn off the projector.

Symbols of Button Operations

This projector can be operated using buttons on the remote control or the top control on the main unit. The remote control allows you to operate all functions of the projector. In this manual, the button operation is shown as below.



Symbols Used in This Manual

Meanings of the following symbols used in this manual are as follows:



A precaution about operation or restriction is given here.

An important matter that you should be aware of before operation or a useful tip is provided here.

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- Adobe is a trademark of Adobe systems Incorporated.
- Other company names and product names are registered trademarks or trademarks of the respective companies.
- The "HD ready" logo is a trademark of EICTA.

Safety Instructions

Before operating this projector, read this manual thoroughly in order to operate the projector properly.

This projector offers many convenient features and functions. Operating the projector properly enables you to manage those features and maintain it in good condition for a long period.

Improper operation may result in not only reducting the product-life, but also malfunctions, fire hazards, or other accidents.

If your projector is not operating correctly, read this manual again, check operations and cable connections, and try the solutions shown in the "Troubleshooting" section at the end of this booklet. If the problem still persists, contact the service center or the dealer where you purchased the projector.



CAUTION

Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.

A Safety Precautions

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

- This projector projects intense light from the projection lens. Do not stare directly into the lens if possible, as doing so may result in eye damage. Be especially careful that children do not stare directly into the beam.
- Install the projector in an appropriate position. Installing the projector in an unappropriate position may result in a fire hazard.
- Allow for appropriate space above beside and behind of the projector cabinet for allowing air circulation and cooling of the projector. Minimum clearances must be maintained. If the projector is to be built into a compartment or similarly space, the minimum distances must be maintained. Do not cover the ventilation slot on the projector. Heat build-up can reduce the service life of your projector, and can also be dangerous.



- Do not put any flammable objects or spray cans near the projector, as the hot air exhausted from the ventilation holes may result in an explosion.
- If the projector is not to be used for an extended period of time, unplug it from the power outlet.

READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.

All the safety and operating instructions should be read before beginning to operate the product.

Read all of the instructions given here and retain them for later use. Unplug this projector from the AC power supply before cleaning. Do not use liquid or aerosol cleaners on the projector. Use a damp cloth for cleaning.

Follow all warnings and instructions marked on the projector.

For added protection of the projector during a lightning storm, or when it is left unattended or unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power surges.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...

Do not use attachments not recommended by the manufacturer as they may result in hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall or shelf mounting should be carried out in accordance with the manufacturer's directions, and should use a mounting kit approved by the manufacturers.

An appliance and cart combination should be moved with care.

Sudden stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Slots and openings in the back and bottom of the cabinet are provided for ventilation, to insure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind onto the projector.

Do not install the projector near the ventilation duct of air-conditioning equipment.

This projector should be operated using only the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized dealer or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by people walking on it.

Do not attempt to service this projector yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed.
- b. If liquid has been spilled into the projector.
- c. If the projector has been exposed to rain or water.
- d. If the projector does not operate normally after following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operating condition.
- e. If the projector has been dropped or the cabinet has been damaged.
- f. When the projector exhibits a distinct change in performance-this indicates a need for servicing.

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or injury.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

AC Power Cord Requirement

The AC Power Cord supplied with this projector meets the requirements for use in the country you purchased it.

AC Power Cord for the United States and Canada:

The AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).

The AC Power Cord has a grounding-type AC line plug. This is a safety feature to ensure the plug fits into the power outlet. Do not try to tamper with this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.



THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

NOTE FOR CUSTOMERS IN THE US

H LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS.



European Union (and EEA) only

This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service. Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources and will avoid incurring administrative sanctions according to art. 50 and following of Italian legislative decree 22/97. For more information regarding return and recycling of WEEE products, please visit www.canon-europe.com/environment.

(EEA: Norway, Iceland and Liechtenstein)

Federal Communication Commission Notice

Multimedia Projector, Model: SX6/SX60/X600

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: 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.

The cable with a ferrite core provided with the projector must be used with this equipment in order to comply with Class B limits in Subpart B of Part 15 of the FCC rules. Use of a shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A., Inc.

One Canon Plaza, Lake Success, NY 11042, U.S.A. Tel No. (516) 328-5600

Canadian Radio Interference Regulations

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

A Lamp Handling Precautions

This projector uses a high-pressure mercury lamp which must be handled carefully and correctly as mentioned below.

- A lamp may explode with a loud sound or burn out due to a shock, scratch, or use beyond its expiry date.
- The lamp life may differ from lamp to lamp and according to the usage environment. There is no guarantee that all lamps will last for the same period of time. Some lamps may fail in a shorter period of time than other similar lamps.
- A lamp gradually becomes darker over time.
- If the projector indicates that the lamp should be replaced (i.e., the LAMP REPLACE indicator lights up twice), the chances of an explosion increase. Replace the lamp with a new one immediately if such is the case.
- Always keep your face away from the exhaust vent so that you are not injured from the gas and broken lamp shards.

If a Lamp Explodes

If a lamp explodes, gas and broken shards may scatter inside the projector and may come out of the exhaust vent. The gas contains toxic mercury. Open windows and doors for ventilation. If you inhale the gas or the shards of the broken lamp contact your eyes or mouth, consult a doctor immediately. If a lamp explodes, its shards may scatter inside the projector. Ask the Canon service representative to clean and check the inside of the projector and replace the lamp.



Disposal of Waste Lamp

Dispose of the projectors mercury lamp according to local regulations just like the fluorescent lamps.

Carrying/Transporting the Projector

- This projector is a precision machine. Do not subject the projector to strong shocks or vibrations or turn it down.
- Install the lens cap to protect the lens and put the projector in the carrying bag to protect it from dust and scratches on the surface of it when you carry the projector.
- Do not put the projector in the carrying bag until the cooling fan stops rotating. The projector may be damaged due to the heat.
- The carrying bag is not designed to protect the projector from external shocks. When carrying the projector with it put in the carrying bag, do not give a shock to it, drop it, or place anything on it. The projector may be damaged or malfunctioned.
- Do not transport the projector through a courier or transport service with the carrying bag. Put the projector in an impact-resistant transport case if such is the case.

Installation Precautions

Ensure that the projector is installed with a minimum distance of 1 m (3.3') from its left, right, rear, and top panels to the neighboring object such as a wall.

Installation

Install the projector correctly. Incorrect installation may cause troubles and accidents.

- Do not tilt the projector more than 20 degrees above and below the horizontal.
- Do not point the projector up or down.
- Do not install the projector vertically.

• The projector may be damaged if it is tilted more than 20 degrees above or below.

Hot Air from Exhaust Vent

- Hot air is exhausted from the exhaust vent. Do not place any object near the exhaust vent.
 - Do not put any spray cans near the vent. The internal pressure increases due to heat, such may result in an explosion.
 - Do not put any metallic object on the projector. It may become hot, resulting in an accident or injury.
 - Do not put anything such as a plant pot near the exhaust vent.
 - Do not put anything near the exhaust vent that may deform or deteriorate due to heat.
 - Do not seat anyone near the exhaust vent.
- The area around the exhaust vent and the cabinet above the exhaust vent become hot. Do not touch these areas, or you may get burnt. In particular, keep children away from these areas.
- Do not put anything that may deform or discolor due to heat on the projector.

Do Not Use in the Following Environments

- Do not install the projector in a humid or dusty location or a position where there is a lot of oily or cigarette smoke. Optical parts such as a lens and mirror may be stained, resulting in poor picture quality.
- Do not use the projector in a place subject to either very high or very low temperatures.
 - Operating temperature: +5°C to +35°C
 - Storage temperature: -10°C to +60°C

Condensation

If the projector is carried from a cold place to a warm place or the room temperature is
raised rapidly, condensation may form on the lens and mirror due to the moisture in the
atmosphere, resulting in a blurred picture. Wait until condensation evaporates and normal picture is shown.





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BEFORE USE

Before Use

Supplied Accessories

Check whether the following accessories are supplied with the projector.

• Remote control • Batteries (type AAA, two) • Computer connection cable for remote control (DVI/Mini D-sub, 15-pin) (1.8m/5.9') [YH7-2052] • Power cord (2m/6.6') • USB cable (1.8m/5.9') • Component cable [YH7-2054] (RCA/Mini D-sub, 15-pin) (0.4m/1.3') [YH7-2084] For Continental Europe For the U.S.A and Canada Carrying bag Lens cap Lens cap strap User's Manual Quick Start Guide Warranty card

Installing the Lens Cap

As shown in the illustration on the right, let the lens cap strap through the hole on the lens cap, and then the lens cap strap insertion hole.

• When the projector is not in use, attach the lens cap to protect the lens from dust and other foreign objects.

Putting the Projector in the Carrying Bag

As shown in the illustration on the right, put the projector in the carrying bag with its lens faces sideway.

The lens may be damaged or its function such as zooming or focusing may be malfunctioned.





Part Names

Main Unit of Projector

Front Side



Rear Side



BEFORE USE



Mounting the Projector on the Ceiling You can mount the projector on the ceiling. You need an optional ceiling mounting bracket (part number: RS-CL06) for it. Contact the dealer where you purchased the projector for more detailed information.



 If you mount the projector on the ceiling, you have to invert the projected image by selecting [Image flip H/V] from the menu (P85).

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Buttons on the Remote Control and Top Control

Remote Control

BEFORE USE



This projector can be operated using buttons on the remote control or the top control on the main unit.

The remote control allows you to operate all functions of the projector.

- (1) Infrared Remote Emitter Sends a signal to the infrared remote receiver on the main unit.
- (2) POWER button (P35, 53) Turns the projector on or off.
- (3) AUTO SET button (P41, 60) Performs auto adjustment on focusing, keystone distortion, screen color correction, and so on (Auto Setup Function).
- (4) IMAGE button (P50) Switches among image modes (image qualities).
- (5) INPUT button (P43, 45, 61) Switches among input signals.
- (6) AUTO PC button (P49) Adjusts tracking and so on automatically in accordance with signal from a computer when ANALOG PC-1 or ANALOG PC-2 is selected.
- (7) FOCUS button (P46) Adjusts focusing.
- (8) ZOOM button (P37) Adjusts the image size.
- (9) OK button (P77) Determines the item selected from the menu. Also works as the left button of a mouse under the USB connection (P70).

Top Control



(10) POINTER button (P75)

Selects the upper, lower, left, or right item in the menu. Also moves the mouse cursor under the USB connection.

On the top control, the [<] and [>] buttons also turn the volume up and down, respectively (P67).

(11) KEYSTONE button (P47)

Corrects keystone distortion.

(12) MENU button (P75)

Displays a menu on the screen.

(13) PAGE button (P71)

Acts as the Page Up and Page Down keys on the computer keyboard under the USB connection.

Pressing \bigcirc scrolls to the previous page and pressing \bigcirc scrolls to the next page.

(14) D.ZOOM button (P69)

Zooms the image in or out digitally. Pressing (a) enlarges the image and pressing (a) reduces the image.

(15) SPOT button (P68)

Performs the spot light function.

(16) R-CLICK button (P70)

Acts as the right button of a mouse under the USB connection.

(17) NO SHOW button (P66)

Turns the picture into a black image.

- (18) MUTE button (P66) Mutes the sound.
- (19) VOL button (P67) Adjusts the sound volume.
- (20) FREEZE button (P67) Freezes the projected image.
- (21) P-TIMER button (P68) Displays the time elapsed since this button was pressed.

(22) LIGHT button (P26)

Turns on or off the lights of the remote control buttons.

Indicators on the Top Control

Top Control



(1)	POWER indicator (P35, 53, 9	6)
	Indicates the projector status	
	Red:	The projector can be turned on.
	Flashing red:	The projector is being turned off (the lamp is being
	riddining red.	cooled).
	Green:	The projector is on.
	Flashing green:	The projector is being turned on.
	Blink between red and green:	The projector is under the power management
		mode.
(2)	WARNING lamp (P112)	
	Flashes red when a problem	has been detected on the projector.
(3)	LED illumination lamp (P100)	
	Indicate the projector status v	vith 3 blue LEDs.
	Blinking from the left:	The projector is being turning on.
	Blinking from the right:	The projector is being turned off.
	Middle LED flashing slowly:	The image is blackened out (NO SHOW).
	Left and right LEDs flashing s	5
		The image is stopped (FREEZE).

Input Terminals on Main Unit



(1)	Input Terminal-1 (DIGITAL IN/ANALOG IN-1) (P32, 33, 57) Receives a digital (DIGITAL PC) and analog PC signal (ANALOG PC-1). Receives a digital content image signal (DIGITAL VIDEO).
(2)	Input Terminal-2 (ANALOG IN-2) (P32, 33, 56) Receives an analog PC signal (ANALOG PC-2). Receives a component and SCART image signal (COMPONENT/SCART).
(3)	Monitor Output Terminal (ICI) (P34) Outputs an analog PC signal to display an image on an external monitor.
(4)	SERVICE PORT jack Exclusively used by the service personnel (it is not used normally).
(5)	S-VIDEO IN terminal (P57) Receives an S-Video signal from an AV equipment.
(6)	VIDEO IN terminal (P58) Receives a composite video signal from an AV equipment.
(7)	AUDIO IN terminal (P34) Receives an audio signal from a computer or AV equipment.
(8)	USB terminal (P70) Connected to the computer with a USB cable when the remote control is used as the mouse of the computer. (you cannot use this terminal to receive any video image)
(9)	Input Terminal Indicator (P43, 61)Indicates the input signal status.Green: The input signal is confirmed and an image is projected.Flashing green: The input signal is confirmed but no image is projected.Off: An input signal is not confirmed (a cable is not connected).

Preparing the Remote Control

Installing Remote Control Batteries

2

- 1 Open the battery compartment lid. Slide the lid with it pressed down.
- Insert batteries. Insert new two AAA-size batteries in the compartment with the + and poles positioned correctly.
- Replace the compartment lid.







- You can check the batteries of the remote control by pressing the [LIGHT] button.
 If all buttons on the remote control do not light when the [LIGHT] button is pressed, or buttons are inoperative when you attempt to operate the projector, replace with new batteries.
 - It is recommended to check the batteries before a presentation.

Remote Control Operating Range

Point the remote control to the infrared remote receiver on the front or rear of the projector whenever pressing any button.

- Use the remote control within a distance of approximately 5 m (16.4') from the projector.
- Use the remote control within an angle of 30° in any direction from directly in front of the infrared remote receiver.



The remote control may be inoperative if:

- There is an obstacle between the remote control and main unit.
- The infrared remote receiver on the main unit is exposed to direct sunlight or strong light of lighting equipment.
- The remote control uses infrared light.
- When you use two projectors at the same time, you can change the channel settings to prevent the two remote controls from interfering with each other (P100).

Safety Instructions

Before Use

Setting Up the Projector

SETTING UP THE PROJECTOR

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Determining the Distance to the Screen

The projected image size is determined by the distance between the projector lens and the screen. Select the place where the desired image size is obtained according to the illustration shown below.



Screen siz (W x H) cr		40" 81 x 61	60" 122 x 91	80" 163 x 122	100" 203 x 152	150" 305 x 229	182" 370 x 277	200" 406 x 305	250" 508 x 381	300" 610 x 457
Projection	Zoom (max)	1.2 m (3.9')	1.8 m (5.9')	2.4 m (7.9')	3.0 m (9.8')	4.5 m (14.8')	5.4 m (17.7')	5.9 m (19.4')	7.4 m (24.2')	8.9 m (29.2')
distance	Zoom (min)	2.0 m (6.6')	2.9 m (9.6')	3.9 m (12.9')	4.9 m (16.1')	7.4 m (24.2')	9.0 m (29.5')	-	-	-
H1		55 cm (1.8')	82 cm (2.7')	110 cm (3.6')	137 cm (4.5')	206 cm (6.8')	250 cm (8.2')	274 cm (9.0')	343 cm (11.3')	411 cm (13.5')
H2		6 cm (0.2')	9 cm (0.3')	12 cm (0.4')	15 cm (0.5')	23 cm (0.8')	28 cm (0.9')	30 cm (1.0')	38 cm (1.2')	46 cm (1.5')

H1 and H2: The height of the screen from the intersection of optical axis and screen surface when an image is projected at right angle to the screen.

- Install the projector at the position where the projection distance is between approximately 1.2 m (3.9') to 9 m (29.5'). If the installation position is too close or too far, the image is out of focus or the screen becomes dark, respectively.
- The sizes in the above table have been obtained assuming that the aspect ratio is 4:3. They may vary from the actual sizes depending on the type of the projected image.
- For the relationship between the screen size and projection distance, see the table on page 119.
 - You can also adjust the image size with the zoom function (P37).

Determining the Installation Position

Placing in Front of the Screen

Place the projector perpendicular to the screen as far as possible.

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 A slight error in the projection angle can be corrected using the [KEYSTONE] button (P47).



Placing on a Level Place

Place the projector on a level place as far as possible.

- A slight tilt can be corrected using the rear adjustable foot. (P38)
 - Make sure that the installation position is free from any obstacle that may block the exhaust vent (fan) on the right side of the projector and the air intake vent on the bottom of the projector.
 - The screen must not be exposed to direct sunlight or light from lighting equipment. In a bright room, it is recommended to limit ambient lighting in order to improve the image quality.

Ceiling Mounting or Rear Projection

You can mount the projector on the ceiling (Ceiling mounted) with it turned up side down or place it behind the screen (Rear) if you use a translucent screen. If you mount the projector on the ceiling, you have to invert the projected image (P85).







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Connecting the Projector to the Computer

Connect the projector to the computer.

Connecting to Video Terminals



- To ensure projection of high-resolution high-quality images, it is recommended to use high-performance cables.
- An adapter may be required depending on the shape of the connector on the computer. For more detailed information, refer to your computers instruction manual.



- Before connecting cables, turn off both the projector and computer.
 - It may project an image inappropriately when projecting the digital PC signal in 1280 x 1024 or 1400 x 1050 depending on the type of computer or DVI cable (SX6/SX60).
 - The USB terminal is used to use the remote control as the computer mouse. An image cannot be projected simply by connecting the USB cable.

Connecting to an External Monitor

You can display an image from the projector to an external monitor.

Connecting to Audio Terminals

Connect an audio cable between the projector and computer if you want to use the projectors speaker.





- You can connect one external monitor. The multi-monitor display is not supported.
 - The projected image is displayed on the external monitor.
 - You cannot output the input signal to the external monitor if it is DIGITAL PC.
- Use an audio cable without a built-in R resistor. Using an audio cable with a built-in resistor turns down the sound.
 - The built-in speaker is monaural.
 - The speaker plays the sound from the equipment which the audio cable is connected to regardless of the image input signal.

Starting Projection

Connect the power cord and turn on the projector to start the projection.

• Once the projector is turned off, it cannot be turned on for a while. Wait until the lamp is cooled down and the [POWER] indicator lights in red.

Connect the power cord.

Fully insert the power cord plug into the socket. The [POWER] indicator flashes red.



2 Press the [POWER] button.

The [POWER] indicator flushes green, and then lights in green.



The countdown window is displayed for approximately 20 seconds, and then the guiding message for the auto setup function appears.



The LED illumination lamp blinks blue until the projection is started. To project an image immediately, press the [OK] button.

- Enter a password if the Password input screen appears (P101, 102).
- You can turn on the projector by connecting the power cord without pressing the [POWER] button (direct power on) (P97).
- You can display a specified Logo on the countdown screen (P88).
- You can specify whether to enable or disable the LED illumination lamp (P100).
- You can skip the countdown window (P88).



Connect the Ground Terminal

Connect the ground terminal on the power plug to ground. Otherwise, the operating computer may suffer electromagnetic radiation problems and poor reception by TV and radio.

Unplug the Power Cord When the Projector is Not in Use

The projector constantly consumes approximately 7W power even when it is turned off. To ensure safety, malfunction prevention, and power saving, remove the power plug from the AC outlet when the projector is not used for an extended period of time.

Selecting a Language

A window appears when the projector is turned on for the first time. You can select a language to be used by the projector for displaying menus and so on in the window. Select your language as shown below.

Select a language with the POINTER buttons and press the [OK] button.





Language		
English	Русский	Čeština
Deutsch	Nederlands	Dansk
Français	Suomi	中文简体
Italiano	Norsk	中文繁體
Español	Türkçe	한국어
Português	Polski	日本語
Svenska	Magyar	
	Deutsch Français Italiano Español Português	Deutsch Nederlands Français Suomi Italiano Norsk Español Türkçe Português Polski

An item highlighted in orange will be selected.

- Focus the projected image before selecting the language if it is out of focus (P46).
- You can change the language from the menu at a later time (P98).
Adjusting the Image

Adjusting the Image Size (ZOOM).

Adjust the image size in accordance with the screen.

0

6

1 Press the [ZOOM] button.

The Zoom adjustment window appears.



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Zoom in:

Press [^] for rough adjustment. Press [>] for fine adjustment.

Zoom out:

Press [v] for rough adjustment. Press [<] for fine adjustment.



3 Press the [OK] button.



Change the projector installation position if your desired image size is too large or too small to adjust with the zoom function (P28).





Adjusting the Projection Angle

You can adjust the projection angle with the adjustable foot.

- 1 Lift the front side of the projector and push the adjusting foot lock button. The adjustable foot extends.
- 2 Adjust the projection angle while pushing the adjustable foot lock button, and then release the lock button.

The adjustable feet is fixed.

- With the adjustable foot, the projection angle can be adjusted up to 10 degrees.
 - If the projector is tilting in the lateral direction, use the rear adjustable feet on both sides to adjust its angle. You can adjust up to 10mm with one foot.





If Keystone Distortion is Too Large

Extending the adjustable foot too far causes keystone distortion. If the distortion is too large, adjust the height of the projector with a pedestal.

The keystone distortion can be corrected with the Auto keystone function or by pressing the [KEYSTONE] button. (P41, 47, 60)



Preparing the Computer

Determining the Output Resolution of the Computer

To make the most of the display performance of this projector, set output signal resolution of the computer to an optimum value.

Windows XP

- 1. Right-click on the desktop background and select [Properties] to open the [Display Properties].
- Select the [Settings] tab and move the slider to select "1400 x 1050 pixels" ("1024 x 768 pixels" for X600). If this resolution is not available, select the highest resolution under 1400 x 1050 pixels. (under 1024 x 768 pixels for X600)
- 3. Click the [OK] button.



Macintosh OSX

- 1. Open the Apple Menu and select [System Environment Setting].
- In the System Environment Setting window, click the [Displays] icon to display the Display window.
- 3. Select the [Display] tab and select "1400 x 1050" ("1024 x 768" for X600) from the [Resolution] list. If this setting is not available, select the highest resolution under 1400 x 1050. ("1024 x 768 pixels" or less for X600)
- 4. Close the windows.



For SX6/SX60

-

• If the display resolution of the computer is set to SXGA (1280 by 1024 dots) or WXGA (1280 by 768 dots), it is recommended to select [True size] as the screen mode (P78).

Projecting the Image from the Notebook Computer

Most of notebook computers require to turn on the external monitor output to project an image from the projector. To turn on the external monitor output, press the [LCD] or [VGA] function key ([F1] to [F10]) or a key with an icon for the external monitor while pressing the [Fn] key on the keyboard.



The following table lists the key combinations for each personal computer manufacturer.

DELL	[Fn]+[F8]
EPSON	[Fn]+[F8]
FUJITSU	[Fn]+[F10]
GATEWAY	[Fn]+[F3]
HITACHI	[Fn]+[F7]
HP	[Fn]+[F4]
IBM	[Fn]+[F7]

MITSUBISHI	[Fn]+[F5]
NEC	[Fn]+[F3]
Panasonic	[Fn]+[F3]
SHARP	[Fn]+[F5]
SONY	[Fn]+[F7]
SOTEC	[Fn]+[F3]
TOSHIBA	[Fn]+[F5]

For the key combination for the computer series not listed in the above table, refer to the User's Manual that came with the computer.

Performing the Auto Setup

With the auto setup function, the following set of adjustments is performed automatically when projecting an image from a computer. You can start the projection only with this operation if the input signal has been appropriately selected.

Auto focus

Adjusts the focusing automatically.

Auto keystone

Corrects the keystone distortion (in the vertical direction) automatically.

Auto input

Sets the image input signal automatically.

Auto screen color*

Performs the screen color correction (white balance adjustment) automatically.

*: This is not enabled at the factory.

- Among 4 functions above, the function that has been enabled in the menu is performed during the auto setup. "Auto focus", "Auto keystone", and "Auto input" are enabled in the factory.
 - You can manually set or adjust each function. You can set or adjust a specific function independently if you press the [AUTO SET] button during the manual adjustment.
 - Select [Greenboard] from [Screen color] when using a greenboard (dark green) as a screen (P86).
 - The auto focusing and the screen color correction may not be performed properly depending on the brightness of the room or the condition of the screen. Adjust the image manually if such is the case.

1 Select an input signal.

Select an appropriate input signal by following the steps in the "Selecting an Input Signal" section at the page 43 if you change the input signal due to changing the connection to the computer or so.

Skip this step if you have not changed the input signal since the last projection.

2 Press the [AUTO SET] button.

The Auto setup window appears.



🛯 Auto se	tup		
Auto fo			
🐨 Auto ke	ystone		
🕄 Auto in			
🗔 Auto sc	reen color		
Execute Auto Setup?			
	OK	Cancel	

3 Press the [AUTO SET] button again.

One or more functions highlighted in black are performed automatically.



• You can perform this step by selecting [OK] with the [<] button, and then pressing the [OK] button.

Selecting an Input Signal

You can select an input signal type.

Select an input signal from the followings:

ANALOG PC-1: Analog signal Connecting with a DVI/Mini D-sub 15-pin cable (supplied cable)

DIGITAL PC : Digital signal Connecting with a DVI digital cable

ANALOG PC-2: Analog signal Connecting with a VGA cable or 5-BNC cable

Select an appropriate input signal before starting the auto setup function by following the steps below if you change the input signal due to changing the connection to the computer or so.



 Connecting a DVI cable to Input Terminal-1, select the appropriate input signal with the [INPUT] button in accordance with the setting on the computer (digital signal/analog signal).

Selecting [ANALOG PC-1] or [DIGITAL PC]

1 Press the [INPUT] button.

The [INPUT] window appears.



2 Select the top item in the menu with the [INPUT] button.

The selection is toggled through available input signal types from above.





You can select any input signal type from all options through the $\left[\nu\right]/\left[\Lambda\right]$ button.

3 If the target input signal is unavailable from the list at the left, press the [>] button, and then press the $[\vee] / [\wedge]$ button to select the target input signal from the list at the right.







4 Press the [OK] button.





Selecting ANALOG PC-2 Select [ANALOG PC-2] for Input Terminal-2. -1 Press the [INPUT] button. The [INPUT] window appears. 0 8 INPUT D ANALOG PC-2 INPUT AUTO PC SCART %. (:Ð COMPONENT Ð 6.3 B VIDEO 2 Select the second top item in the menu with the [INPUT] button. The selection is toggled through available input signals from above. Ø A INPUT AUTO PC (:€ % :Ð 63 You can select any input signal type from all options through the $[v] / [\Lambda]$ button. 3 If the ANALOG PC-2 is unavailable from the list at the left, press [>], and then press $[\vee]$ / [^] to select the ANALOG PC-2 from the list at the right. ത് 00 INPUT 🖉 ANAI

OF



4 Press the [OK] button.



MENU

Adjusting the Focus

You can adjust the focus.

Follow the steps below to adjust the focus manually if the Auto setup function (Auto focus) does not adjust the focus appropriately.

1 Press the [FOCUS] button.

The Focus adjustment window appears.





Press the POINTER buttons to adjust the focus.

6



Rough adjustment: $[v] [\Lambda]$ Fine adjustment : [<] [>]

- You can activate the Auto focus function if you press the [AUTO SET] button now.
- The projected image may be out of focus if the projection distance is beyond the range of 1.2 m (3.9') to 9 m (29.5'). Move the projector installation position if such is the case (P28).

2

Adjusting Keystone Distortion

The Auto setup function (Auto keystone) automatically adjusts the keystone distortion in a longitudinal direction. Follow the steps below if the function does not adjust the distortion appropriately or you want to adjust the keystone distortion in a horizontal direction.

1 Press the [KEYSTONE] button.

The [Keystone adjustment] windows appears.





2 Press the POINTER buttons to adjust the focus.





• You can activate the Auto keystone function if you press the [AUTO SET] button now.

To reduce the length of the upper edge, press [\land].



To reduce the length of the lower edge, press [v].



To reduce the length of the left edge, press [<].



To reduce the length of the right edge, press [>].



3 Press the [OK] button.



- The result of keystone adjustment is memorized. If you place the projector at the same position, the keystone adjustment is not necessary.
 - When the Keystone adjustment is selected, signals are processed digitally. The image may look different from the original one.
 - The aspect ratio of the image may change after the keystone adjustment.
 - Keystone can be adjusted vertically and horizontally within the range of +/-20 degrees. The amount of adjustment may be less than +/-20 degrees depending on the combination of the amount of optical zooming, input signal type, and adjustment direction (vertical or horizon-tal).
 - If the keystone distortion is too large to adjust, move the projector installation position.
 - To reset the keystone adjustment to 0, press the [KEYSTONE] button again to display the [Keystone reset] window. On the window, select [OK] with the [<] button, and then press the [OK] button.

Setting Up the Computer Screen Automatically (AUTO PC)

This projector automatically makes optimum settings for the total number of dots and tracking depending on a signal type (SXGA+, XGA, etc.).

The auto PC adjustment function does not need to be performed if the projector is projecting an image properly with [AUTO SETUP].

You can use this function if the input signal is [ANALOG PC-1] or [ANALOG PC-2].

1 Press the [AUTO PC] button.

The auto PC adjustment function is activated and the projected image is optimized.



- For some computers, the auto PC adjustment function does not optimize the projected image. If such is the case, you need to make settings (total dots, tracking, horizontal/vertical positions, horizontal/vertical pixels, etc.) for the input signal (P81-83).
- The previous signal type ([ANALOG PC-1] or [ANALOG PC-2]) is recorded. If you connect the projector to the same computer, you can project the image with the same settings as before simply by selecting the input signal.

Selecting an Image Mode (IMAGE)

You can select an image mode depending on the projecting image. You can also adjust the image quality (sharpness, gamma, color correction, etc.) as you like.

1 Press the [IMAGE] button.





The Image mode window appears. The selection is toggled among following modes by pressing the button.

[Standard]	Select this to project an image with near-original quality and a high
	regard for reproduction of white. It is also suited to project moving
	pictures such as a TV program or a DVD movie in a bright room.

- [Presentation] Select this to project an image with quality suited for the presentation. It also suited to project moving pictures with a high regard for the brightness.
- [Movie] Select this to project moving pictures of all kinds. Its brightness is suited to easily enjoy the atmosphere of a movie theater in a dim room.
- [Movie&Photo] Select this to project an image or moving pictures with quality suited for those shot by a digital camera or so.
- [sRGB] Select this if you want to project an image in the display mode conforming to Windows standard color space. It is suited to project an image shot by an sRGB-compatible digital camera.
- [AdobeRGB] Select this if you want to project an image in the display mode conforming to Adobe RGB color space. You can project an image with more accurate color reproduction since It has wider color gamut than sRGB.
- [Home Cinema] Select this to project a movie with quality suited to seriously enjoy the atmosphere of a movie theater in a dark room.

SX6	SX60	X600
Standard	Standard	Standard
Presentation	Presentation	Presentation
Movie&Photo	Movie	Movie
AdobeRGB	Home Cinema	sRGB
sRGB	sRGB	

- You can adjust the followings for each image mode. For detailed information on the procedures, refer to "Image Adjustment Menu" (P89 to 95).
 - Brightness Adjust this when the image is too bright or dark.
 - Contrast Adjust this to decrease or increase contrast of the entire image.
 - Sharpness Adjust this to soften or sharpen an image.
 - Gamma Adjust this when light or dark portions of an image are obscure.
 - Color adjustment
 - Adjust this to adjust the color level and balance.
 - Advanced adjustment
 - Adjust this when color tones are different from those of the original image.
 - The results of adjustments are saved for each input signal. Once you save them, you can project images with the same settings.
 - You can set an image mode from the menu. Refer to [Image mode] section in the menu (P89)

Selecting a Screen Mode (Aspect)

You can select one of four screen modes depending on the aspect ratio or display resolution of your computer.

- You can specify the aspect ratio from the menu. Refer to [Aspect] in the menu (P78).
- Full screen



Select this to project a computer screen with aspect ratio of 4:3 (SXGA+ [1400 by 1050 dots] or XGA [1024 by 768 dots]). If you select this mode to project the computer screen with aspect ratio of 5:4 (SXGA [1280 by 1024 dots]), it is compressed vertically or horizontally.

Select this to project a wide screen or computer screen with

Since the image is projected with it fitted to either the width or length of the computer screen, it does not display the top and bottom portions or the leftmost and rightmost portions of the image.

Select this to project a computer screen with aspect ratio of 16:9. Since the image is projected with it fitted to the width of the computer screen, it blackens the top and bottom portions of the

Select this mode under normal conditions.

aspect ratio of 5:4 (SXGA).

screen.

Auto



Wide Screen



True size



Select this if you want to project a computer screen in its original size.

A clear image can be obtained because of no image processing.

- If the display resolution of the computer is higher than 1400 by 1050 dots (1024 by 768 dots for X600), select a lower resolution before starting projection.
 - The upper, lower, left, and/or right portions of a projected image may be missing depending on the Aspect setting.

Turning Off the Projector

- You may shorten the lamp life if turning off the projector while its lamp is still in an unstable state shortly after turning on the projector. Wait at least 5 minutes before turning off the projector.
 - Wait at least 5 minutes before turning on the projector when you turn off the projector. It may shorten the lamp life if you turn on the projector immediately after turning it off.
 - Using the projector for a long time may shorten the life of the lamp and internal optical components.
- When the projector is turned off, it starts cooling the lamp. You cannot turn it on during the process.

Press the [POWER] button.

A confirmation message appears on the screen.

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To continue projection, wait until the confirmation message disappears (approximately 4 seconds) or press a button other than the [POWER] button.

- **2** Press the [POWER] button again while the confirmation message is displayed. The lamp goes off, the [POWER] indicator starts flashing in red, and it starts cooling the lamp.
- **3** Remove the power cord from the AC outlet. It continues to cool down the lamp even after removing the power cord.



- You can carry the projector immediately after the use ("Off & Go" function).
- • You can turn off the projector by disconnecting the power cord without pressing the [POWER] button (direct power on). (P97)
 - The LED illumination lamp turns on to indicate the lamp is being cooled when the power cord is connected.

Setting Up the Power Management Function

You can use the power management function that turns off the lamp if the projector receives no signal input for a while.

If you enable the power management mode, the projector displays a countdown timer if the projector is receiving no signal input and is not operated for 30 seconds, and approximately 5 minutes later the lamp is turned off and the projector goes into the power management mode.

You can select one of the following power management modes from the menu (P96).

Standby mode

Select this mode if you want to start projection soon.

In the standby mode, the lamp is turned off and cooled down. When the lamp has been cooled down, the [POWER] indicator starts flashing in red and green to indicate it is standby. It will start projection if the input signal is inputted or any button on the top control or remote control is pressed.

Exit mode

Select this mode to turn off the projector automatically.

In the exit mode, the lamp is turned off and cooled down. When the lamp has been cooled down, the [POWER] indicator stops flashing in red and stays on and the power is turned off.



The projector becomes inoperative when the lamp is being cooled in a power management mode.

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PROJECTING AN IMAGE FROM AV EQUIPMENT

Projecting an Image from AV Equipment

Connecting the Projector to an AV Equipment

Connect the projector and AV equipment.

Connecting to Video Terminals



- Before connecting cables, turn off both the projector and AV equipment.
 - The above illustrations are just examples. For more detailed information, refer to the manual for the connecting AV equipment.



About the Component Cable

The projector cannot be connected to an AV equipment only with the supplied component cable (RCA/Mini D-sub 15-pin). Please purchase either of the following cables according to the type of the terminal on the AV equipment:

- RCA terminal: RCA x 3/RCA x 3 cable
- D-terminal: D-terminal/ RCA x 3 cable



- Connect an audio cable if you want to use the projector's speaker (P34).
 Set the input signal as [COMPONENT] by referring to "Projecting an Imponent state of the input signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting and Imponent signal as [COMPONENT] by referring to "Projecting an Imponent signal as [COMPONENT] by referring to "Projecting an Imponent signal as [COMPONENT] by referring to "Projecting an Imponent signal as [COMPONENT] by referring to "Projecting an Imponent signal as [COMPONENT] by referring to "Projecting as [COMPONENT] by referring as [COMPONENT] by
 - Set the input signal as [COMPONENT] by referring to "Projecting an Image from the Computer" and "5-BNC cable" if you want to connect the projector to an AV equipment using a 5-BNC extension cable via an video control apparatus in a hall or so (P33).



Projecting a Video Image from an AV Equipment

You can project a video image with the steps similar to those for projecting an image from a computer.

This section provides information specific to the projection from an AV equipment.

For more detailed information for each step, refer to the corresponding page.

- 1 Turn on the projector. → P35*
 - Connect the power cord and turn on the projector (P35).
 - Adjust the height of the projecting image (P38).
 - Select a display language for the first time (P36).
- 2 Prepare the AV equipment.
 - Turn on the AV equipment and start playing the video image.

For digital content video image:

- **3** Press the 100 button to switch the input signal. \Box P61
 - Select [DIGITAL VIDEO] as the input signal.
- 4 Press the AUTOSET button. \Box P60
 - Adjust the input signal, focusing, keystone distortion, and so on automatically using the auto setup function.
- 5 Press the ^{MAGE} button.
 - Select an appropriate image mode depending on the projecting image. P50*

Stopping projection...

Turn off the projector. P53*

• Turn off the projector and remove the power cord from the AC outlet.

* Those steps are same as those for projecting the computer screen.

Performing the Auto Setup

With the auto setup function, the following set of adjustments is performed automatically when projecting a video image from an AV equipment. You can start the projection only with this operation if the input signal has been appropriately selected.

Auto focus

Adjusts the focusing automatically.

Auto keystone

Corrects the keystone distortion automatically.

Auto input

Sets the image input signal automatically.

Auto screen color*

Performs the screen color correction (white balance adjustment) automatically.

*: This is not enabled at the factory.

- Among 4 functions above, the function that has been enabled in the menu is performed during the auto setup. "Auto focus", "Auto keystone", and "Auto input" are enabled in the factory.
 - You can manually set or adjust each function. You can set or adjust a specific function independently if you press the [AUTO SET] button during the manual adjustment.
 - Select [Greenboard] from [Screen color] when using a greenboard (dark green) as a screen (P86).
 - The auto focusing and the screen color correction may not be performed properly depending on the brightness of the room or the condition of the screen. Adjust the image manually if such is the case.

Select [DIGITAL VIDEO].

Perform the steps shown in the "Selecting DIGITAL VIDEO" section on page 61 before performing the auto setup if you want to project a digital content video image. Skip this step if [DIGITAL VIDEO] has been selected at the previous projection.

2 Press the [AUTO SET] button.

The [Auto setup] window appears.



🖪 Auto	setup			
👁 Auto	focus			
	keystone			
🕫 Auto				
🗔 Auto	screen color			
Execute Auto Setup?				
	OK		Cancel	

3

Press the [AUTO SET] button again.

One or more functions highlighted in black are performed automatically.



You can perform this step by selecting [OK] with the [<] button, and then pressing the [OK] button.

Connecting with an HDMI/DVI cable or DVI digital

Selecting an Input Signal

Select [DIGITAL VIDEO] among the following 4 input signals by following the steps shown in the "Selecting DIGITAL VIDEO" section below if you want to project a digital content video image.

DIGITAL VIDEO : Digital signal

cable

COMPONENT	: Component signal	Connecting with a supplied component cable
SCART	: SCART signal	Connecting with a supplied SCART cable
VIDEO	: Video signal	Connecting with a video cable
S-VIDEO	: S-VIDEO	Connecting with an S-Video cable

The component, video, and S-VIDEO signals are automatically set if a cable is connected and the input signal is confirmed.

- A LED (green) on a terminal flashes when an input signal is confirmed. The LED turns on if the signal is selected and projected.
 - Connecting with a HDMI/DVI cable, the image may be projected with the minimum resolution (480p or 575p) due to the specification of the AV equipment.

Selecting DIGITAL VIDEO

1 Press the [INPUT] button.

The [INPUT] window appears.



ið INPUT	
₽ ANALOG PC-1 ▶	DIGITAL PC
ANALOG PC-2	ANALOG PC-1
COMPONENT	DIGITAL VIDEO
📼 VIDEO	
S S-VIDEO	

2 Select the top item in the menu with the [INPUT] button.

The selection is toggled through available input signal types from above.



•

You can select any input signal type from all options through the $\left[\nu\right]/\left[\Lambda\right]$ button.

If [DIGITAL VIDEO] is unavailable from the list at the left, press [>], and then press [v] / [^] to select it from the list at the right.





🖘 INPUT	
ANALOG PC-1	DIGITAL PC
ANALOG PC-2	ANALOG PC-1
COMPONENT	DIGITAL VIDEO
📼 VIDEO	
S-VIDEO	

4 Press the [OK] button.



Selecting SCART Select [SCART] for Input Terminal-2. -1 Press the [INPUT] button. The [INPUT] window appears. 0 🕀 INPUT ANALOG PC-2 SCART ⊳ INPUT AUTO PC % (:Ð Ð 6.9 📼 VIDEO S-VIDEC 2 Select the second top item in the menu with the [INPUT] button. The selection is toggled through available input signals from above. Ø A INPUT AUTO PC (€ :Ð 63

• You can select any input signal type from all options through the [v] / [A] button.

3 If the SCART is unavailable from the list at the left, press [>], and then press [∨] / [∧] to select the SCART from the list at the right.



4 Press the [OK] button.



Selecting a Screen Mode (Aspect)

You can select one of three screen modes depending on the aspect ratio of your AV equipment or content software.

• You can specify the aspect ratio from the menu. Refer to [Aspect] in the menu (P78, 79).

Full screen

Select this to project a video image with aspect ratio of 4:3. 4:3



Wide Screen

Select this to project a video image with aspect ratio of 16:9.

Refer to the table on the page 119 for more detailed information on the screen size for the wide screen.

16:9



■ Auto ([DIGITAL VIDEO]/[COMPONENT])

Select this to switch between [Normal] and [Wide Screen] automatically in accordance with the video image.



• The upper, lower, left and right portions of a projected image may be missing depending on the [Aspect] setting.

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USEFUL FUNCTIONS AVAILABLE DURING A PRESENTATION

Useful Functions Available During a Presentation



Freezing the Picture



Useful when:

- You want to perform a computer operation which is irrelevant to the proceedings of the presentation.
- > You want to stop a moving image.

Freeze the moving image.

Freezing an Image



The "FREEZE" message is shown on the screen.

Canceling the FREEZE function

Press the button again to cancel the FREEZE function.

- You can expand or reduce the frozen image (P69).
 - The (left and right) LED illumination lamps on the top control flushes slowly while stopping the image.
 - A guiding message appears if you press an invalid button while the FREEZE function is on.



Adjusting the Volume



- Useful when:
- You want to adjust the volume level of the projectors speaker.

Adjusting the Volume



Volume bar appears on the screen.



•

Adjust the volume or mute setting on the computer if the volume level is too low.

Showing the Elapsed Time



Useful when:

You want to manage the proceedings of the presentation.

The elapsed time from 00:00 to 59:59 is displayed at the lower right corner of the screen.



Starting the Countdown



Press this button once to display the timer and start counting.

Stopping the Countdown

Press the button again to stop the countdown.

Canceling the Countdown

Press the button again to disappear the timer.

Pointing with a Spotlight



- Useful when:
- You want to point to a portion of an image that should draw attendees' attention.

Highlight a desired portion of the projected image with a spotlight.



Showing the Spotlight



A spotlight appears at the center of the screen and the image becomes dark except for the spotlight.

Press the local button repeatedly to change the shape of the spotlight.

Moving the Spotlight





Move the spotlight to a desired position.

• Press the [OK] button to cancel the SPOT function.

Zooming an Image



Useful when:

- > Zoom in an object such as a small graph during a presentation.
- Moving unnecessary information off the screen to focus on the current subject.

Zoom the projected image.

Zooming In an Image



R

Press this button repeatedly until the image becomes the desired size.



- The magnification appears on the screen when you press the [D.ZOOM] button.
 - The zoom ratio is 1x to 12x.
 - You can freeze the enlarged image.
 - Press the [OK] button to cancel the digital zoom function.
 - The following guiding message appears if you press an invalid button during operating the digital zoom function.



Moving an Image to the Desired Position

If the image you want to zoom in stays out of the screen or out of the center of the screen, you can move it to the desired position.







Zooming Out an Image



Press this button repeatedly until the image becomes the desired size.

Operating a Mouse with the Remote Control



- Useful when:
- You want to operate a mouse with the remote control.

You can use the supplied remote control as the wireless mouse for your computer.

Connecting a USB Cable

Make sure that both the computer and projector are turned off, and then connect the supplied USB cable between the USB terminals on the computer and the projector.



 This function is supported on Windows XP, Windows 2000, Windows Me, or Mac OS 9.2 and later.



Using the Left Button of the Mouse





You can click, double-click, or drag an object with this button.

Using the Right Button of the Mouse





Page Up or Down through the Pages



Useful when:

You want to page up or down through the projected application pages with the remote control.

You can page up or down in the projected application with the supplied remote control.



Page Up



Page Down



 This function acts as the Page Up and Page Down keys on the computer keyboard. You can not use this function depending on the application.
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SETTING UP FUNCTIONS FROM MENUS

Setting Up Functions from Menus

How to Use Menus

Some of the projector's function are used through the menu screen. It consists of following three menus.

ANALOG PC-1 Display settings Full screen Aspect Full screen Signal select 0 × 0 Menu position Screen color Normal Image fib H/V None Elser screen settings	Display settings menu (P78) This menu is used to select an input signal and make various settings related to display.
ANALOG PC-1 Image adjustment Kinage mode Standard K Brightness K and K brightness K brightnes	Image adjustment menu (P89) This menu is used to make various adjustments to the projected image. You can make the adjustments according to your preference while checking the image.
ANALOG PC-1 Auto setup Power management mode Off Direct power on Off Auto setup Pointect power on Off Auto setup Direct power on Off Auto setup On Auto setup Auto setup	System settings menu (P96) This menu is used to set various func- tions of the projector. You can set them regardless of the input signal.

The menu items may differ depending on the input signal.
 The projector stores the settings for each input signal (8) and image mode (up to 5).

Symbols Indicating Item Categories

Menu items are classified into two categories, menu items used to project the image from the computer and menu items used to project the image from the AV equipment.



Menu item used when projecting an image from AV equipment.

DIGITAL VIDEO COMP. SCART COMP./SCART VIDEO/S-VIDEO

DIGITAL VIDEO input COMPONENT input SCART input COMPONENT input/SCART input VIDEO input/S-VIDEO input This section provides the basic operation on the menu.

1

- Press the [MENU] button. A menu window appears. ŝ ANALOG PC-1 OK Display settings 12 Aspect Full screen 0 × 0 MENU Input signal select E 🛚 Input signal settings Menu position Screen color Image flip H/V Normal None 📼 User screen settings Press the [MENU] button again to close the menu window. 2 Press [<] / [>] to select the appropriate tab. Image adjustment tab (Image adj.) Display settings System settings Press $[\Lambda]$ to move the cursor on the tab if it is tab tab not on it. LOG PC-1 **(13)** 🔳 Image adjustment Image mode Standard * Brightness *⊏ +0 Contrast +0+0 Sharpness OF > OK Gamma D a 2 Color adjustment Advanced adjustment Lamp mode Normal MENU Reset 3 Press [v] to select a menu item you want to set. You can also use $[\Lambda]$ to select the menu item. 🔳 Image adjustment Image mode Standard * Brightness * □ 0 00 Contrast ۲ Sharpness +02 Gamma ±0 ок Color adjustment **n** Advanced adjustment
 Lamp mode Normal Reset MENU
- SETTING UP FUNCTIONS FROM MENUS

Some menu items provide more detailed menu items.

-

Menu items

4 Set the menu item. There are four types of menu items that you make a setting: Directly From a list With a slider In a different screen From a list Directly Example: Tracking Example: Aspect ••• COMPONENT Display settings 1 \bigcirc Aspect Auto Input signal settings lnput signal select Full screen Total dots 1688 Wide Screen Progressive 🖂 Tracking Menu position Horizontal position Screen color. Normal **U**ertical position 16 Image flip H/V None 1400 🚍 Horizontal pixels 🖾 User screen settings Vertical pixels 1050 Press the [OK] button to display a Press [<] [>] to increase/decrease the setting. list. Press [v] [n] to select a desired setting. With a slider In a different screen • Example: Contrast Example: Menu position ANALOG PC-1 💷 Image adjustment 0 Menu position ½ Image mode Standard ╈ Brightness * _____ *****+0 Contrast **)+0** Use the pointer button to set menu position. ۲ Sharpness άà π +0 Press OK to close. 2 Gamma riii +0 Color adjustment Advanced adjustment 💡 Lamp mode Normal 🕯 Reset Press [<] [>] to move the slider. Press the [OK] button to display a different screen. Then follow the instruction on the screen.

5 Press the [OK] button.

In some menu items, the setting is enabled just by making a selection.



6 Press the [MENU] button when you finish. The menu disappears.



Setting Display Status from the Display Settings Menu







Adjusting the Total Number of Dots	Adjusting the Tracking
[Total dots]	[Tracking]
ANALOG PC	ANALOG PC
You can adjust the total number of dots in the horizontal direction.	You can adjust the tracking when the projected image flickers due to a tracking error.
Input signal settings Total dots	Input signal settings Tracking
Input signal settings Total dots 1688 Tacking 5 Horizontal position 209 Vertical position 16 Horizontal pixels 1400 Vertical pixels 1050	Input signal settingsTotal dots1688Tracking5Horizontal position209Vertical position16Horizontal pixels1400Vertical pixels1050
> Increases the total number of dots.	> Increases the set value.
Control Con	< Decreases the set value.
Press the [MENU] button when you finish.	Press the [MENU] button when you finish.
 Perform this adjustment if the auto PC adjustment function cannot adjust the project image correctly. The setting is recorded for [ANALOG PC-1] and [ANALOG PC-2] separately. 	 Perform this adjustment if the auto PC adjustment function cannot adjust the project image correctly. The setting is recorded for [ANALOG PC-1] and [ANALOG PC-2] separately.







Selecting a Menu Position

[Menu position]



You can select the position of the menu displayed on the screen.



Move the menu to the desired position with $[\land]$, [<], $[\lor]$, and [>], and then press the [OK] button.



Press the [MENU] button when you finish.



None (Normal image)



Ceiling mounted



Rear



Rear, Ceiling mounted



When hanging the projector from the ceiling, make sure to use optional brackets. Contact your Canon dealer.







Setting the Image Quality from the Image Adjustment Menu

Selecting an Im [Image mode]	-		
	DEO COMP./SCART VIDEO/S-VIDEO an image mode suitable for the b.	AdobeRGB	Selec image ing to can
ANALOG PC-	Image adj.	Home Cinema	accur has w Selec qualit atmos dark r
	age adjustment	SX6 Standard Presentation Movie&Photo AdobeRGB sRGB Press the [OK] the [MENU] bu	
	(SX6) Select this to project an image with near-original quality and a high regard for reproduction of white. It is also suited to project moving pic- tures such as a TV program or a DVD movie in a bright room.	 (brighting) image The prisetting 	can a tness, mode rojecto gs for e mode
Presentation	Select this to project an image with quality suited for the presentation. It also suited to project moving pic- tures with a high regard for the brightness.		
	Select this to project moving pic- tures of all kinds. Its brightness is suited to easily enjoy the atmo- sphere of a movie theater in a dim room.		
Movie&Photo sRGB	Select this to project an image or moving pictures with quality suited for those shot by a digital camera or so. Select this if you want to project an image in the display mode conform- ing to Windows standard color		
	ing to this suited to project an image shot by an sRGB-compatible digital camera.		

Select this if you want to project an image in the display mode conforming to Adobe RGB color space. You can project an image with more accurate color reproduction since Its has wider color gamut than sRGB. a Select this to project a movie with

guality suited to seriously enjoy the atmosphere of a movie theater in a dark room.

SX6	SX60	X600
Standard Presentation Movie&Photo AdobeRGB sRGB		Standard Presentation Movie sRGB

Press the [OK] button to confirm, and then press the [MENU] button.

- You can adjust the image quality (brightness, contrast, etc.) for each image mode as you wish.
 - The projector stores the image quality settings for each input signal (8) and image mode (up to 5) separately.



Adjusting the Sharpness	Making a Camma Correction
	Making a Gamma Correction
[Sharpness]	[Gamma]
	DIGITAL PC ANALOG PC
DIGITAL VIDEO COMP./SCART VIDEO/S-VIDEO	DIGITAL VIDEO COMP./SCART VIDEO/S-VIDEO
You can adjust the sharpness when you want to	You can make a gamma correction if light or
make an image sharper or softer.	dark portions of an image are obscure.
MENU	MENU
▼	▼
🔲 🔳 Image adj.	🔲 🔳 Image adj. 🖃
Sharppeso	Gamma
Sharpness	Gamma
PANALOG PC-1	2 ANALOG PC-1
□ Image adjustment 🥥	III Image adjustment
½ Image mode Standard * Brightness *	½ Image mode Standard ★ Brightness ★ □ ■ ★ +0
● Contrast ● +0	€ Contrast
Bharpness Barpness B	
Color adjustment	Color adjustment
Advanced adjustment Lamp mode Normal	Advanced adjustment Lamp mode Normal
ill Reset	🟥 Reset
> Increases the sharpness of an	> Makes dark and obscure portions of
image.	an image visible.
Control Con	Makes light and obscure portions of an image visible.
0	e e e e e e e e e e e e e e e e e e e
Press the [MENU] button when you finish.	Press the [MENU] button when you finish.
This setting is saved for the currently selected input signal and image	This setting is saved for the currently selected input signal and image
selected input signal and image	- Sciected input signal and image
mode.	mode.

Making Color Adjustment (1)	Making Color Adjustment (2)
[Color adjustment]	[Color adjustment]
DIGITAL PC ANALOG PC DIGITAL VIDEO SCART	VIDEO/S-VIDEO COMP.
You can make color adjustment for each color	You can adjust color level and color balance and
(red, green, and blue).	make color adjustment for each color (red, green, and blue).
MENO	MENU
Image adj.	
▼	🔲 🔳 Image adj. 🕡
Color adjustment	▼
	Color adjustment
Scolor adjustment T R Gain T +0	
* R Offset *	Color adjustment Q Color level Q +0
● G Gain ● +0 ★ G Offset	Color balance •+0
B Gain	● R Gain ● ● ● +0 * R Offset * ● +0
* B Offset * *+0	● G Gain ● ====== ● +0 * G Offset *==== *+0
R/G/B Gain Adjusts the intensity of each color.	🕩 B Gain 🛛 🕕 🛶 🕩 +0
[>] Increases the intensity of color.	* B Offset *
[<] Decreases the intensity of color.	Color level Adjusts the intensity of each color.
R/G/B Offset Adjusts the color reproducibility of	[>] Increases the intensity of color.
dark portions of each color.	[<] Decreases the intensity of color.
 [>] Increases the color reproducibil- ity of color. 	Color balance Adjusts the color balance of a red-
[<] Decreases the color reproduc-	dish or greenish image.
ibility of color.	[>] Corrects a reddish image.
Press the [MENU] button when you finish.	[<] Corrects a greenish image.
	R/G/B Gain (Refer to "Making Color Adjustment
This setting is saved for the currently selected input signal and image	(1)") R/G/B Offset (Refer to "Making Color Adjustment
Selected input signal and image mode.	R/G/B Offset (Refer to "Making Color Adjustment (1)")
mode.	Press the [MENU] button when you finish.
	You cannot make color adjustment if the video format is PAL_PAL_M_PAL_N
	the video format is PAL, PAL-M, PAL-N, or SECAM.
	 This setting is saved for the currently
	selected input signal and image
	mode.





Resetting the Image Settings [Reset]		
DIGITAL PC ANALOG PC DIGITAL VIDEO COMP./SCART VIDEO/S-VIDEO		
You can reset the current image settings to the default settings if you want to make all image settings all over again.		
MENU V V Reset		
Image mode will be reset to default. OK		
OK Resets the image settings.		
tings.		

Press the [OK] button to confirm, and then press the [MENU] button.



 The projector stores the image settings for each input signal (8) and image mode (up to 5) separately. If you select [OK], the settings saved for the currently selected set of the input signal and image mode are reset. Performing [Color adjustment] or [Advanced adjustment]:

A check mark () appears on the Image Adjustment menu if you perform [Color adjustment] or [Advanced adjustment (Dynamic gamma, Mem. color correct, or 6-axis color adjust)].

🗌 🔳 Image adjustme	nt	9
½ Image mode	Standard	
🗶 Brightness	*	* +0
Contrast	•	— () +0
Sharpness	•	+ 0
Z Gamma		 +0
🖧 Color adjustment	~	
Advanced adjustment		
🖞 Lamp mode	Normal	
f Reset		

Setting Various Function with the System Settings Menu







Selecting a Display Language [Language]



DIGITAL VIDEO COMP./SCART VIDEO/S-VIDEO É.

You can select a language to be used in the menu from 20 different languages.



🖻 Language		
English	Русский	Čeština
Deutsch	Nederlands	Dansk
Français	Suomi	中文简体
Italiano	Norsk	中文繁體
Español	Türkçe	한국어
Português	Polski	日本語
Svenska	Magyar	

English	English
Deutsch	Germany
Français	French
Italiano	Italian
Español	Spanish
Português	Portuguese
Svenska	Swedish
Русский	Russian
Nederlands	Dutch
Suomi	Finnish
Norsk	Norwegian
Türkçe	Turkish
Polski	Polish
Magyar	Hungarian
Čeština	Czech
Dansk	Danish
中文简体	Simplified Chinese
中文繁體	Traditional Chinese
한국어	Korean
日本語	Japanese





Setting up the Digital Video Input Signal [Digital video] You can select the standard of the digital video input signal.	Setting a Password [Password settings] DIGITAL PC ANALOG PC DIGITAL VIDEO COMP/SCART VIDEO/S-VIDEO You can set a password to the projector. Once you set the password, you will need to enter the password each time you turn on the projector. WENU Password settings Password protection. On Enable the password protection. Press the [OK] button to confirm, and then press the [MENU] button. Password entry screen appears at power- on. Enter a 4-digit password with [A], [V], [<], and [>]. If the password is valid, projection starts. If you enter a wrong password three times, the pro- jector will be turned off. • To cancel the password, remove the power plug while holding down the [MENU] button until the projector beeps.





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MAINTENANCE

Cleaning the Projector

Clean the projector frequently to prevent dust from settling on the surface. A dirty lens may ruin the quality of the projected image.



- The main unit is very hot immediately after turning off the projector. Wait until the projector cools down sufficiently before cleaning the projector. Otherwise, you may get burned or injured.
- Before cleaning the projector, be sure to remove the power plug from the AC outlet. Otherwise, electric shock or fire may result.

Wipe the projector's main unit softly with a soft cloth.

If the projector is heavily soiled, soak the cloth in water with a small amount of detergent in it, squeeze the cloth very well, and then wipe the projector with it. After cleaning, wipe the projector with a dry cloth.



- Never use volatile cleaning liquid or benzine, as these may damage the finish of the projector. When using a chemical dust cloth, make sure to read the instructions thoroughly.
- When cleaning the projector's lens, use a commonly available air blower or lens cleaning paper. The lens surface is easily damaged, so do not use a hard cloth or tissues.



When Not Used for an Extended Period of Time Be sure to attach the lens cap on the lens and store in the supplied carrying bag.

Cleaning and Replacing the Air Filter

An air filter is installed in the air intake vent on the bottom of the main body to protect the internal lens and mirror from dust. Should the air filter become clogged with dust, the projector may be damaged since it will block the air flow into the projector and raises the internal temperature of the projector.



- The main unit is very hot immediately after turning off the projector. Wait until the projector cools down sufficiently before cleaning the projector. Otherwise, you may get burned or injured.
- Before cleaning or replacing the air filter, be sure to remove the power plug from the AC outlet. Otherwise, electric shock or fire may result.
- Do not insert any object into the projector through the air filter opening. You may suffer electric shock or injury due to the high-voltage parts or rotating parts.

Cleaning the Air Filter

Turn the projector upside down, remove the cover by pushing the latch, remove the air filter, and clean it with a vacuum cleaner.

When cleaning dust off the side exhaust vent and the bottom air intake vent, bring the vacuum cleaner nozzle close to them directly.

- Clean the air filter frequently.
- After cleaning the air filter, install it by following the removal steps in reverse.

Replacing the Air Filter

- 1 Turn off the projector, remove the power plug from the AC outlet, and let the projector stand for at least 1 hour.
- 2 Remove the filter cover by pushing the position of the arrow.
- **3** Remove the air filter.
- 4 Install a new air filter.
- **5** Install the filter cover securely without any space.



- Attach the lens cap when replacing the air filter.
 - Handle the air filter carefully. If damaged, the air filter will not work appropriately.
 - Replace the air filter whenever you replace the lamp.
 - An air filter can be ordered from your dealer.

Replacing the Lamp

When the time of use of the lamp exceeds 1,400 hours (2,300 hours for SX60), the following message (two types) is displayed for 10 seconds each time the projector is turned on.

 When the time of use is 1,400 to 1,500 hours: (2,300 to 2,500 hours for SX60)

Lamp replacement	
Obtain a new lamp. Do you want to display t	his message again?
ОК	Cancel

- [<], [>], the [OK] button, and the [POWER] button are available during this message is displayed.
- When the time of use is 1,500 hours or longer: (2,500 hours for SX60)



- * The [POWER] button is available during this message is displayed.
- This message will not be displayed again if you select [No] in response to the message "Do you want to display this message again?".
 - You can check the time of use of the lamp in [Lamp counter] in the [System settings] menu (P102).

- When replacing the lamp, turn off the projector, wait until the cooling fan stops, remove the power plug from the AC outlet, and let the projector stand for at least 1 hour. Otherwise, you may get burned because the main unit is very hot immediately after the projector is turned off.
 - Do not touch the inner glass surface when you replace the lamp. Otherwise, the projector's performance may degrade.
 - Make sure to handle the lamp carefully and correctly since it may explode if it is scratched or shocked.
 - Do not remove screws unless specified.

Replacing Lamp

```
This projector uses the following lamp.
Lamp type No. SX6/X600: RS-LP02
SX60: RS-LP03
```



Be sure to use the specified lamp.



A lamp can be ordered from your dealer or Canon home page.
MAINTENANCE

Replacing the Lamp

- 1 Turn off the projector, disconnect the power plug from the AC outlet, and then let the projector stand for at least 1 hour.
- **2** Loosen a screw with a flathead screwdriver and remove the lamp cover.

- **3** Loosen two screws, pull up the handle, and then remove the lamp.
- 4 Fully insert a new lamp and secure it with two screws.
 - * After the installation, be sure to push down the handle.

- **5** Replace the lamp cover and tighten the screw.
- 6 Turn on the projector.
- 7 Bring up the menu and select [System settings] -> [Other settings] -> [Lamp counter] (P102).
- 8 Select [Reset] -> [OK] to reset the lamp counter.







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TROUBLE-SHOOTING

WARNING Lamp Flash Patterns

The WARNING lamp on the Control Panel flashes in red when there is a trouble in the projector.



• Turn off the projector, wait until the cooling fan stops, and remove the power plug from the AC outlet before dealing with the trouble.

Flash Pattern	Meaning	Countermeasure	
One flash	Temperature abnormality	The temperature inside the projector is too high for some rea- son or the outside air temperature is higher than the specified one. If the problem is inside the projector, check whether the pro- jector is installed and operated normally, turn off the projector to cool its inside, and retry projection. If the same warning occurs again, the projector may be defective. Contact your dealer.	
Two flashes	Faulty lamp	The lamp has burnt out. Replace the lamp with a new one. If the same warning is experienced again, the lamp drive circuit may be defective. Contact your dealer.	
Three flashes	Faulty lamp cover	The lamp cover is open. Check whether the lamp cover is installed correctly. If it is installed correctly, the lamp cove detection switch may be defective. Contact your dealer.	
Four flashes	Faulty cooling fan	The cooling fan or another component may be defective. Con- tact your dealer.	
Five flashes	Faulty power supply	The abnormal voltage is applied to some parts in the power supply or any other problem has occurred in the power supply. Contact your dealer.	
Six flashes	System failure	Some of the functions may be defective. Turn off the projector and retry projection. If the same warning is experienced again, contact your dealer.	

Symptoms and Solutions

You cannot turn on the projector.

Cause	Countermeasure	
The power cord is not connected correctly.	Check whether the power cord is connected correctly (P35).	
The power cord has just been connected.	You cannot turn on the projector until the [POWER] indicator turns red after connecting the power plug (P35).	
You attempted to turn on the pro- jector immediately after turning it off.	The projector cannot be turned on for a while after it is turned off. Wait for a while before pressing the [POWER] button again (P53).	
The safety device has activated because you put the projector in the carrying bag during the cooling fan was rotating.	You cannot release the safety device. Contact your dealer.	
The safety device is activated because the air intake or the exhaust vent is blocked and the internal temperature of the projec- tor is increased.	You cannot release the safety device for safety reasons. Con- tact your dealer.	

You cannot project an image from the projector.

Cause	Countermeasure	
Any connection cable is connected incorrectly.	Check whether the projector is connected to the computer or AV equipment correctly (P32, 56).	
20 seconds have not passed since the projector was turned on.	When the projector is turned on, the Opening window is dis- played for approximately 20 seconds. To project an image immediately, press the [OK] button on the remote control or top control (P35).	
No image is sent from the AV equipment.	Check that an image is played on the connected digital camera, video camcorder, DVD, etc.	
The wrong video terminal or signal type is selected.	Check that the correct video terminal and signal type are selected (P43, 61).	
The [NO SHOW] function has been selected.	Press the [NO SHOW] button on the remote control (P66).	
No image is sent due to the prob- lem in the computer.	Turn on the projector and computer in this order again.	

You cannot hear sound.

Cause	Countermeasure	
The audio cable is not connected correctly.	Check the cable connection of the audio cable (P34).	
The [MUTE] function is enabled.	Press the [MUTE] button on the remote control (P66).	
The volume level is adjusted to the minimum.	Press the [VOL+] button on the remote control or top control to adjust the volume level (P67).	
An audio cable with a built-in resistor is used.	Use an audio cable without a built-in resistor.	

The projected image is blur.

Cause	Countermeasure	
The image is out of focus.	Adjust the focus (P46).	
The lens cap is not removed.	Remove the lens cap.	
The distance to the screen is too short.	Check whether the distance to the screen is appropriate. If the distance is shorter than approximately 1.2 m (3.9'), the projector cannot focus on the screen (P28, 119).	
The projector is not placed straight in front of the screen.	Check whether the projector is placed obliquely to the screen. A slight error in the projection angle can be corrected through the keystone adjustment function (P38, 47).	
The projector has been moved to a place where the temperature varies a lot.	When the projector is moved from a low-temperature place to a high-temperature place, condensation may form on the lens. The condensation will evaporate a while later and the projec- tor will be able to project a normal image.	
The lens is stained.	Clean up the lens (P106).	

You cannot project an image appropriately.

Cause	Countermeasure	
The projected image is inverted in the vertical or horizontal direction.	The ceiling mounted/rear projection setting is incorrect. Check the [Image flip H/V] setting in the [Display settings] menu (P85).	

You cannot project an image from a notebook computer.

Cause	Countermeasure	
The connection cable is not con- nected correctly.	Check whether the connection cable is connected to the video terminal of the computer correctly (P32, 33).	
The video signal type is incorrect.	Check whether the selected signal type is correct (P78, 79, 118).	
It is not set the external monitor out- put setting on the notebook cor- rectly.	Turn on the external monitor output on the notebook computer. To turn on the external monitor output, press the [LCD] or [VGA] function key or a key with an icon for the external moni- tor while holding down the [Fn] key on the keyboard of the notebook computer (P40). The combination of keys used to perform this operation varies among computer manufacturers. For more detailed informa- tion, refer to the User's Manual that came with your computer.	
The displayed image is not the same as that displayed on the notebook computer.	Check whether the dual screen (multi-display) mode is selected on the notebook computer. If the dual screen mode has been selected, change it to the simultaneous display mode on the notebook computer. The output setting method varies among computer manufac- turers. For more detailed information, refer to the User's Man- ual that came with your computer.	

The projector is forced to be turned off.

Cause	Countermeasure	
The air intake or exhaust vent is blocked.	Check whether the air intake or exhaust vent is blocked. If the air intake or exhaust vent is blocked, the temperature inside the projector rises and the power is automatically turned off to protect the projector. Wait until the internal temperature gets down, and then turn on the projector without blocking the intake and exhaust vents (P21, 35).	
The air filter is dirty.	Check whether the bottom air filter is clogged with dust. If the air filter is clogged, clean or replace the air filter (P107).	
The lamp has exploded (or it is defective).	Check whether the lamp has exploded. If the lamp has exploded, replace it. The lamp may be defec- tive if it has not exploded. Check the lamp by replacing it with a spare lamp if you have one (P12, 108, 109).	
The operating temperature is inappropriate.	Check whether the operating temperature is 5 to 35°C (P13).	
Other reasons	The projector may be damaged. Contact your dealer.	

You cannot operate the remote control.

Cause	Countermeasure	
Batteries are not installed properly or they have run out.	Check whether batteries are installed correctly. If batteries are installed correctly, replace them with new batteries (P26).	
You are operating the remote con- trol from the outside of the remote control operating range.	Check whether you are operating the remote control within the remote control operating range. Also check whether there is any obstacle between the infrared remote receiver of the projector and the remote control (P26).	
You are operating the remote con- trol under an inappropriate operat- ing environment.	Check whether the infrared remote receiver of the projector is exposed to direct sunlight or strong light of lighting apparatus (P26).	
The channel setting of the remote control does not match with the setting of the projector.	Check whether the channel setting of the remote control has been changed. You can check the [Remote control] setting in the [System settings] menu (P100).	
The key lock function is prohibiting the remote control operation.	Check whether [Key lock] is enabled to disable the remote control operation. In the System settings menu, set [Key lock] to [Off] (P98).	

You cannot use the wireless mouse function.

Cause	Countermeasure	
The USB cable is not connected correctly.	Check whether the USB cable is connected between the projector and computer correctly (P70).	
A mouse driver is not installed.	Check whether the mouse is functioning on the computer. If it is not, install a mouse driver to the computer.	
The mouse is not recognized due to a problem in the computer.	Turn on the projector and computer in this order again.	

Safety Instructions

Before Use

Setting Up the Projector

Projecting an Image from the Computer

Projecting an Image from AV Equipment

Useful Functions Available During a Presentation

Setting Up Functions from Menus

Maintenance

Troubleshooting

Appendix

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APPENDIX

Appendix

Supported Computer Signal Types

This projector supports following signal types.

If your computer or AV equipment is compatible with any one of these signal types, the projector's auto PC function select the input signal type to project an image appropriately.

ANALOG PC

Signal	Resolution	Horizontal fre-	Vertical fre-
type	(dots)	quency (KHz)	quency (Hz)
	,,	31.469	59.94
		31.469	70.09
		37.50	75.00
VGA	640 x 480	37.861	72.81
-	-	37.861	74.38
	-	43.269	85.01
	720 x 400	31.469	70.09
		34.50	55.38
	-	35.156	56.25
	-	37.879	60.32
	-	37.898	61.03
SVGA	800 x 600	38.00	60.51
010.1	000 x 000	38.60	60.31
		46.875	75.00
		48.077	72.19
		53.674	85.06
		44.028	54.63
		46.897	58.19
		47.00	58.31
		48.363	60.00
		48.496	60.02
		56.476	70.07
XGA	1024 x 768	58.032	72.00
NUA	1027 × 100	60.023	75.03
		60.314	74.92
		60.994	74.92
		62.04	77.07
		63.478	79.35
		68.677	85.00
	1280x768	47.986	59.83
WXGA	1260x768 1360x768	47.986	60.02
	1152 x 864	64.196	70.39
	1102 X 004	61.17	65.28
	1152 x 900	61.846	66.00
	1 152 X 900		
	1000 × 060	71.399	75.64
	1280 x 960	60.00	60.00
		62.50	58.63
		63.337	59.98
SXGA		63.364	59.95
		63.735	60.01
	1000 + 1001	63.791	60.18
	1280 x 1024	63.899	60.00
		63.981	60.02
		71.694	67.19
		76.97	72.00
	[79.976	75.03
0)/0 :	1 100	81.135	76.11
SXGA+	1400 x 1050	63.981	60.02
UXGA	1600 x 1200	75.00	60.00
MAC LC 13	640 x 480	34.967	66.60
MAC 13	640 x 480	35.00	66.67
MAC 16	832 x 624	49.725	74.55
MAC 19	1024 x 768	60.248	75.08
MAC 21	1152 x 870	68.681	75.06
MAC	1280 x 960	75.00	75.08
		80.00	75.08

DIGITAL PC

Signal type	Resolution (dots)	Horizontal fre- quency (KHz)	Vertical fre- quency (Hz)
D-VGA	640 x 480	31.469	59.94
D-SVGA	800 x 600	37.879	60.32
D-XGA	1024 x 768	48.363	60.00
D-SXGA*	1280 x 1024	63.981	60.02
D-SXGA+*	1400 x 1050	63.981	60.02

Only for SX6/SX60

DIGITAL VIDEO

Signal type	Horizontal frequency (KHz)	Vertical frequency (Hz)
D-480p	31.469	59.94
D-575p	31.250	50.00
D-720p	44.955	59.94
D-1080i**	28.125	50.00
D-1080i**	33.716	59.94

** Interlaced signal

COMPONENT

Signal type	Horizontal frequency (KHz)	Vertical frequency (Hz)
480p	31.469	59.94
480i**	15.734	59.94
575p	31.250	50.00
575i**	15.625	50.00
720p	44.955	59.94
1035i**	33.750	60.00
1080i**	28.125	50.00
	33.716	59.94

** Interlaced signal

The specifications in the table above are subject to change without prior notice.

This projector does not support any computer signal of which dot clock is 170MHz or higher.

Relationship between Screen Size and Projecting Distance

Screen size at 4:3	Projecting dis	stance at (m)		Screen si	
aspect ratio Type – W x D (cm)	Max. zooming	Min. zooming	H1 (cm)	H2 (cm)	aspect ratio Type – W x D (cm)
40" 81 x 61	1.2 (3.9')	2.0 (6.6')	55 (1.8')	6 (0.2')	37" 81 x 46
50" 102 x 76	1.5 (4.9')	2.5 (8.2')	69 (2.3')	8 (0.26')	46" 102 x 57
60" 122 x 91	1.8 (5.9')	2.9 (9.6')	82 (2.7')	9 (0.3')	55" 122 x 69
70" 142 x 107	2.1 (6.9')	3.4 (11.2')	96 (3.1')	11 (0.36')	64" 142 x 80
80" 163 x 122	2.4 (7.9')	3.9 (12.9')	110 (3.6')	12 (0.4')	74" 163 x 91
90" 183 x 137	2.7 (8.9')	4.4 (14.6')	123 (4.0')	14 (0.46')	83" 183 x 103
100" 203 x 152	3.0 (9.8')	4.9 (16.1')	137 (4.5')	15 (0.49')	91" 203 x 114
110" 224 x 168	3.3 (10.8')	5.4 (17.7')	151 (5.0')	17 (0.5')	101" 224 x 126
120" 244 x 183	3.6 (11.8')	5.9 (19.4')	165 (5.4')	18 (0.59')	110" 244 x 137
130" 264 x 198	3.9 (12.8')	6.4 (21')	178 (5.8')	20 (0.66')	119" 264 x 149
140" 284 x 213	4.2 (13.8')	6.9 (22.6')	192 (6.3')	21 (0.69')	128" 284 x 160
150" 305 x 229	4.5 (14.8')	7.4 (24.2')	206 (6.8')	23 (0.75')	138" 305 x 171
160" 325 x 244	4.8 (15.5')	7.9 (25.9')	219 (7.2')	24 (0.79')	147" 325 x 183
170" 345 x 259	5.1 (16.8')	8.4 (27.4')	233 (7.6')	26 (0.85')	156" 345 x 194
180" 366 x 274	5.4 (17.7')	8.9 (29.2')	247 (8.1')	27 (0.86')	165" 366 x 206
182" 370 x 277	5.4 (17.7')	9.0 (29.5')	250 (8.2')	28 (0.9')	167" 370 x 208
190" 386 x 290	5.6 (18.4')	-	261 (8.6')	29 (0.95')	174" 386 x 217
200" 406 x 305	5.9 (19.4')	-	274 (9.0')	30 (0.98')	184" 406 x 229
210" 427 x 320	6.2 (20.3')	-	288 (9.4')	32 (1.05')	193" 427 x 240
220" 447 x 335	6.5 (21.3')	-	302 (9.9')	34 (1.12')	202" 447 x 251
230" 467 x 351	6.8 (22.3')	-	315 (10.3')	35 (1.15')	211" 467 x 263
240" 488 x 366	7.1 (23.3')	-	329 (10.8')	37 (1.21')	220" 488 x 274
250" 508 x 381	7.4 (24.3')	-	343 (11.3')	38 (1.25')	233" 508 x 286
260" 528 x 396	7.7 (25.3')	-	357 (11.7')	40 (1.31')	239" 528 x 297
270" 549 x 411	8.0 (26.3')	-	370 (12.1')	41 (1.35')	248" 549 x 309
280" 569 x 427	8.3 (27.2')	-	384 (12.6')	43 (1.41')	257" 569 x 320
290" 589 x 442	8.6 (28.2')	-	398 (13.1')	44 (1.44')	266" 589 x 331
300" 610 x 457	8.9 (29.2')	-	411 (13.5')	46 (1.51')	276" 610 x 343

Glossary

6-axis Color Adjustment (P94)

The color adjustment function for an advanced user. You can adjust color balance and color level for 6 axis of RGB (red/ green/blue) and CMY (cyan/magenta/yellow) of the projected image to make a fine color adjustment. You can perform the 6-axis color adjustment in the image adjustment menu.

AdobeRGB (P50, 89)

A color space specification set up by Adobe systems Incorporated which is applied to high performance diaital cameras, displays and others. You can project an image with more accurate color reproduction since Its has wider color gamut than sRGB. In SX6, if you select [AdobeRGB] in the [Image mode] setting, the projector can project the best-quality image conforming to the AdobeRGB Standard. Please be aware that color of the projected image may vary with that of the original image if you project an AdobeRGB compatible image in sRGB mode or project an sRGB compatible image in AdobeRGB mode.

Analog PC (P25, 32, 81)

A signal system used to send analog signal information of R (red), G (green), and B (blue). It is a typical system for connecting a color monitor to a computer. Connect the analog PC output terminal on the computer and Input Terminal-1 or Input Terminal-2 on this projector with a monitor cable. Select [ANALOG PC-1] for Input Terminal-1 and [ANALOG PC-2] for Input Terminal-2 at projection.

Component (P25, 56, 80)

A signal system used to send a color signal (C) with it divided into a B-Y color difference signal and an R-Y color difference signal. This system can project a betterquality image as compared with the composite signal system. Connect the component video terminal on the AV equipment and the Input Terminal-2 on this projector with a component cable. Select [COMPO-NENT] at projection.

Composite (P25, 58)

A video signal system used to send a brightness signal (Y) and a color signal (C) together. Connect the composite output (RCA) terminal on the AV equipment and the VIDEO IN terminal on this projector with a video cable. Select [VIDEO] at projection.

Digital PC (P25, 33)

A signal system used to send digital information of individual display dots. This system is free from deterioration of image quality because of no analog conversion. Connect the DVI output terminal on the computer and Input Terminal-1 on this projector with a DVI connection cable. Select [DIGITAL PC] at projection.

DVI (P33, 43, 57, 61)

A digital video signal connection interface for a computer and AV equipment. This interface allows digital data to be transmitted without converting to analog data, assuring high image quality with no signal degradation. The DVI-I (integrated) connector can be used to transmit both an analog video signal and digital video signal.

Gamma Correction (P91, 93)

A tone adjustment system used during projection of image data. The gamma correction function works effectively when portions of an image are obscure because they are too light or dark.

This projector supports manual gamma correction and dynamic gamma correction which performs the gamma correction automatically.

HDCP (P57, 61)

An abbreviation of High-bandwidth Digital Content Protection which is an encryption technology for copy protection of digital image signals. In SX6/SX60/X600, you can project digital contents copy-protected with the HDCP technology. To project the contents, connect the Input Terminal-1 on the projector and an HDMI terminal or DVI terminal on an AV equipment with a dedicated cable, and then select [DIGITAL VIDEO] from the [INPUT] menu.

HDMI (P57, 61)

A digital video signal connection interface for an AV equipment. Its terminal is more compact than the DVI terminal. It allows to transmit video and audio signals simultaneously.

Memorized Color Correction (P93)

A memorized color is a color in our memory. The memorized color such as blue for the sky is more vivid than the real color, so you may feel colors of a projected image are dull. If such is the case, enable the memorized color correction function to make the colors close to the ones in our memory. You can enable the memorized color correction function in the image adjustment menu.

Progressive (P84)

An image display system used to display the entire screen per scan. For an interlace signal (video signal) that displays one screen by two scans (one for odd lines and one for even lines) is input, progressive processing is required. When the progressive function is turned off, one screen is displayed using image signals per interlace signal, deteriorating the vertical resolution of the image. When the progressive function is turned on, one screen is displayed using image signals per two interlace signals. improving the vertical resolution of the image. Turn off the progressive function when flickering and horizontal lines are noticeable on a fastmoving picture.

Resolution (P39, 79)

The number of dots (horizontal dots x vertical dots) that can be displayed on a computer is called "resolution of display". Resolution indicates the size of the display area (amount of information).

Resolu-	Number of dots		
tion	Hori-	Vertical	
lion	zontal	venticai	
VGA	640	480	
SVGA	800	600	
XGA	1024	768	
SXGA	1280	1024	
SXGA+	1400	1050	
UXGA	1600	1200	



Number of pixels in each resolution

If you select SXGA+ (1400 dots x 1050 dots) as the display resolution for the connecting computer, this projector can project high-resolution images. If your computer does not have the SXGA+ option, select the maximum resolution among the selectable options.

sRGB (P50, 89)

An international standard of color representation (color space) which is applied to general digital cameras, displays and others. In SX6/SX60/X600, if you select [sRGB] in the [Image mode] setting, the projector can project the best-quality image conforming to the sRGB Standard.



S-video (P25, 57, 80)

A signal system (YC separation signal) used to send a brightness signal (Y) and color signal (C) separately. Connect the S-video terminal on the AV equipment and the S-VIDEO IN terminal on this projector with an S-video cable. Select [S-VIDEO] at projection.

Video (P25, 58, 80)

An output terminal widely used in an AV equipment. It is also called as a composite output terminal (pin terminal or RCA terminal). For more details, refer to "Composite".

Specifications

Projector

Proj	ector				
Mode	el name	SX6/SX60/X600			
Display system		RGB liquid crystal system			
Optical system		Color separation by dichroic mirror/polarizing beam splitter and color composition by			
		prism			
	Туре	Reflective liquid crystal panel			
Display device	Size/Aspect rat	0.7" x 3 panels/4 : 3			
	Drive system	active matrix system			
	Number of pixels/	SX6/SX60: 1,470,000 (1400 x 1050) x 3 panels/4,410,000			
	Total Number of pixels	X600: 786,432 (1024 x 768) x 3 panels/2,359,296			
uo	Zoom ratio/Focal length/F value	1.7x/f=21.7 to 35.8 mm/F1.85 to F2.5			
Projection lens	Zooming and focusing system	Electronic operation/electronic operation (with auto focusing function)			
. <u>c</u>	Lens shift	9 : 1 (fixed)			
	source	SX6/X600: 270W high-pressure lamp, SX60: 180W high-pressure lamp			
	en size (projection distance)	40" to 300" (1.2 to 9 m)			
	ber of reproducible colors	16,770,000 colors (full color)			
	Itness	SX6/X600: 3500 lm, SX60: 2500 lm			
	rast ratio	1000:1 (full white : full black)/2000:1 (SX60 in Home Cinema mode)			
Unifo		88%			
Spea		1W monaural x 1			
	mum input resolution	1600 x 1200 dots (compression)			
Tricoxi		UXGA/SXGA+/WXGA/SXGA/XGA/SVGA/VGA			
ŝ	ANALOG PC input	(scan rate: horizontal: 15 to 100KHz, vertical 50 to 100Hz)			
signals	DIGITAL PC input	SX6/SX60: SXGA+/SXGA/XGA/SVGA/VGA, X600: XGA/SVGA/VGA			
Dig	COMPONENT input	1080i, 1035i, 720p, 575i, 575p, 480i, 480p			
ő	RGB SCART input	575i			
Video	DIGITAL VIDED input	1080i, 720p, 575p, 480p			
>	VIDEO/S-VIDEO input	NTSC, PAL, SECAM, NTSC4.43, PAL-M, PAL-N			
	Input Terminal-1	Digital PC, analog PC, digital video (DVI-I connector 29-pin)			
<u>0</u>	Input Terminal-2	Analog PC, component, SCART (mini D-sub 15-pin)			
Input terminals	VIDEO IN terminal	composite (RCA)			
E	S-VIDEO IN terminal	S-Video (mini DIN 4-pin)			
tte	AUDIO IN terminal	Audio signal (stereo mini jack)			
nd	USB terminal	For mouse control (USB type B)			
<u> </u>	SERVICE PORT	RS-232C (mini DIN 8-pin)			
Outo	ut terminal	Analog PC (mini D-sub 15-pin)			
Outp	Digital PC	TMDS (Transition Minimized Differential Signaling)			
	Digital FC	0.7Vp-p, positive polarity, impedance = 75Ω			
	Analog PC	Horizontal/vertical synchronization: TTL level, negative or positive polarity			
ŝ	Analogito	Composite synchronization in G signal: 0.3Vp-p, negative polarity, impedance = 75Ω			
nput signals		Video: 1Vp-p, negative synchronization, impedance = 75Ω			
ig.		S-video: Separate YC signal, Y: 1Vp-p, negative synchronization, impedance = 75Ω			
đ		C: 0.286Vp-p (burst signal), impedance = 75Ω			
du	Video	Component: Separate Y Cb/Pb Cr/Pr signal			
_		Y: 1Vp-p, Negative synchronization, impedance = 75Ω			
		Cb/Pb: 0.7Vp-p, impedance = 75Ω Cr/Pr: 0.7Vp-p, impedance = 75Ω			
	Audio	142mVrms, impedance = 47 K Ω or more			
Noise (normal mode/silent mode)		SX6/X600: 35/31 db, SX60: 30/27 db			
Operating temperature		5 °C to 35 °C			
Power supply		AC 100 – 240 V, 50/60 Hz			
Power consumption					
(normal mode/silent mode/standby)		SX6/X600: 355W/290W/7W, SX60: 250W/225W/7W			
Dimensions		266 (W) x 114 (H) x 336 (D) mm / 10.6 (W) x 4.6 (H) x 13.4 (D) in (excluding protrusions)			
Weig		SX6/X600: 4.7 kg/10.4 lbs, SX60: 4.6 kg/10.1 lbs			
		Remote control, batteries for remote control, power cord, computer connection cable,			
Acce	essories	USB cable, component cable, carrying bag, lens cover, string for lens cover, User's			
		Manual, Quick Start Guide, and Warranty Card.			

Manual, Quick Start Guide, and Warranty Card. 99.99% or more of the LCD panel pixels are effective. During projection, 0.01% or less of pixels may stay lit or unlit due to the charac-Using the projector continuously for an extended period of time may accelerate the deterioration of optical parts.

*

Remote Control

Ļ

Power supply	Two 3.0 V, AAA-size batteries
Operating range	About 5 m (16.4') (to infrared remote receiver)
Dimensions	42 (W) x 22 (H) x 135 (D) mm / 1.7 (W) x 0.9 (H) x 5.3 (D) in
Weight (not including batteries)	55 g

External View



Input terminal-2 (ANALOG IN-2) (Analog PC-2 input/component input terminal)

This terminal is used as a computer analog PC input or component input terminal. Use a D-sub computer cable for connection.

Mini D-sub 15-pin



APPENDIX

1	R	6	Ground (R)	11	Monitor ID0
2	G	7	Ground (G)	12	DDC data
3	В	8	Ground (B)	13	Horizontal sync.
4	Monitor ID2	9	+5 V power	14	Vertical sync.
5	Ground (Horizontal sync.)	10	Ground (Vertical sync.)	15	DDC clock



• The terminal specifications for the analog PC-2 input and component input are the same.

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Options

- Lamp Part No. SX6/X600:RS-LP02 SX60: RS-LP03
- Ceiling mounting bracket Part No: RS-CL06
- Ceiling mounting pipe (360mm) Part No: RS-CL03*
- Ceiling mounting pipe (550mm) Part No: RS-CL04*

- Ceiling mounting pipe (760mm) Part No: RS-CL05*
- Ceiling-mounting plate Part No: RS-CL02**
- DVI digital cable Part No: LV-CA29
- SCART cable Part No: LV-CA31
- Network adapter Part No: RS-NA01

This part is used to hang the projector from a ceiling.

** This part is used to join the ceiling pipe with the ceiling mounting bracket.

For more detailed information, refer to the instruction manual that comes with the ceiling mounting bracket RS-CL06.

Menu Configuration

Off On

Auto

The Display sett	ings menu					
Aspect	DIGITAL PC/ANALOG PC	P78	Menu position	P84		
	Full screen *		Screen color	Norm	aal *	P86
	Auto		Screen color		nboard	FOU
	Wide Screen			Adju		-
	True size			Auju	St Neu/Green/Diue	
	VIDEO/S-VIDEO/SCART	P79	Image flip H/V	None) *	P85
	Full screen *			Ceilir	ng mounted	
	Wide Screen			Rear		
	DIGITAL VIDEO/COMPO-	P78		Rear	Ceiling mounted	
	NENT		User screen settings	1		
	Auto *		<u>_</u>			_
	Full screen		Logo capture		OK/Cancel	P86
	Wide Screen		Logo position		Upper L	P87
Input signal select	ANALOG PC	P79	Logo position		Upper R	107
input oighar coloct	640 x 350	170			Center *	-
	:				Lower L	-
	1680 x 1050				Lower R	-
	VIDEO/S-VIDEO	P80				_
	Auto *		No signal screen	ו	Black	P87
	NTSC				Blue *	
	PAL				User logo	
	SECAM		NO SHOW		Black *	P88
	NTSC4.43				Blue	
	PAL-M				User logo	
	PAL-N					
	COMPONENT	P80	Projector on		Canon logo *	P88
	Auto *				Skip	_
	1080i				User logo	
	1035i		Return			
	720p					
	575p					
	480p					
	575i					
	480i					
	SCART	P80				
	575i					
Input signal settings	ANALOG PC					
input signal settings	Total dots	P81				
	Tracking	P81				
	Horizontal position	P82				
	Vertical position	P82				
	Horizontal pixels	P83				
	Vertical pixels	P83				
Progressive	COMPONENT/VIDEO/	P84				
	S-VIDEO					

* : Factory defaults (settings after reset)



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