# **ViewSonic®**

## PJ452 LCD Projector



ViewSonic

- User Guide
- Guide de l'utilisateur
- Bedienungsanleitung
- Guía del usuario
- Guida dell'utente
- Guia do usuário
- Användarhandbok
- Käyttöopas
- Руководство польэователя
- 使用手冊
- 使用手冊

### **Compliance Information**

#### FOR U.S.A.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) The device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

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.

#### **FCC Warning**

To assure continued FCC compliance, the user must use grounded power supply cord and the cables which are included with the equipment or specified. Also, any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user authority to operate this device.

#### **FCC Warning**

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

Cet appareil numerique de la Classe B respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

#### For European Countries

#### **CE Conformity**



The device complies with the requirements of the EEC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to "Electromagnetic compatibility," and 73/23/EEC as amended by 93/68/EEC Art.13 with regard to "Safety."

#### **User Information for all Countries**

**Notice:** Use the cables which are included with the unit or specified.

#### **Important Safety Instructions**

- 1. Read these instructions completely before using the equipment.
- 2. Keep these instructions in a safe place.
- 3. Heed all warnings.
- Follow all instructions.
- 5. Do not use this equipment near water.
- 6. Clean with a soft, dry cloth.
- 7. Do not block any ventilation openings. Install the equipment in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
- 9. Do not attempt to circumvent the safety provisions of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and the third prong are provided for your safety. If the plug does not fit into your outlet, consult an electrician for replacement of the outlet.
- 10. Protect the power cord from being tread upon or pinched particularly at the plug, and the point where if emerges from the equipment. Be sure that the power outlet is located near the equipment so that it is easily accessible.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tipping-over
- 13. Unplug this equipment when it will be unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as: if the power-supply cord or plug is damaged, if liquid is spilled onto or objects fall into the unit, if the unit is exposed to rain or moisture, or if the unit does not operate normally or has been dropped.

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#### **Product Registration**

To meet your future needs, and to receive any additional product information as it becomes available, please register your product on the Internet at: **www.viewsonic.com**. The ViewSonic Wizard CD-ROM also provides an opportunity for you to print the registration form, which you may mail or fax to ViewSonic.

1 01	Tour Necords
Product Name :	PJ452
	ViewSonic LCD Projector
Model Number :	VS10948
Document Number :	PJ452-1_UG_ENG Rev.1A 09-19-05
Carial Number .	

For Your Pacards

Serial Number : \_\_\_\_\_\_\_

Purchase Date : \_\_\_\_\_\_

A

The lamp in this product contains mercury.

Please dispose of in accordance with local, state or federal laws.

ViewSonic PJ452 iii

Projector

## PJ452 Model No.VS10948 User's Manual – Operating Guide



Thank you for purchasing this projector.

⚠WARNING ► Before using, read the "User's Manual - Safety Guide" and these manuals to ensure correct usage through understanding. After reading, store them in a safe place for future reference.

## About this manual

Various symbols are used in this manual. The meanings of these symbols are described below.

AWARNING This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.

ACAUTION This symbol indicates information that, if ignored, could result possibly in personal injury or physical damage due to incorrect handling.

Please refer to the pages written following this symbol.

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## Projector features

This projector is used to project various computer signals as well as NTSC/PAL/SECAM video signals onto a screen. It requires just a little space for installation and displays a large image from a short distance.

#### O High Brightness

Newly developed 165W UHB (Ultra High Brightness) lamp gives you a higher brightness image on a screen. The image can be still kept as bright and clean enough for use in bright rooms.

#### O Low Noise

WHISPER mode is equipped for reducing acoustic noise for quieter operation. It is perfect for use in low luminance rooms where low noise is more important than brightness.

#### O Compact Body

Even with its many features, this projector is extremely compact and slim, which gives you more flexibility and usability to use it where you want.

## About contents of package

Please see the "Contents of package" of the "User's Manual – Quick Guide". Your projector should come with the items shown there. Contact your dealer immediately if anything is missing.

NOTE • Keep the original packing materials for future reshipment. For moving the projector, be sure to use the original packing material. Use special caution to protect the lens.

Contents of packages

(1) Projector with Lens cover

(2) Strap (for Lens cover)

(3) Filter cover (for bottom-up use)

(4) Remote control

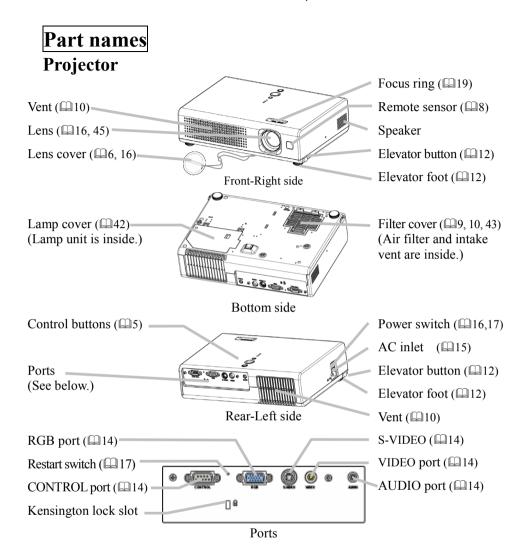
(5) Two AA batteries (for Remote control)

(6) Power cord

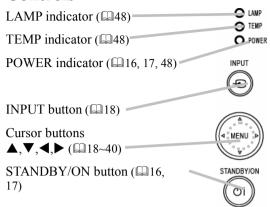
(7) RGB cable

(8) User's manual CD-ROM wizard

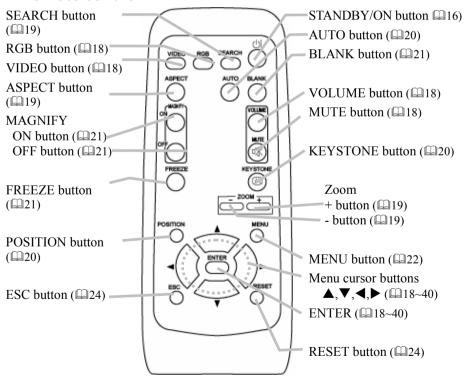
(9) Quick Start Guide



#### **Controls**



#### Remote control



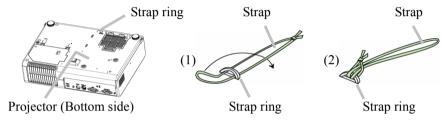
## **Preparations**

### Fastening the lens cover

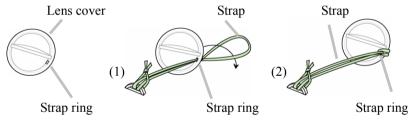
⚠WARNING ➤ Do not fasten the lens cover during use or immediately after use. Handling while the projector is at a high temperature could cause a burn and/or malfunction to the projector. Before operating, make sure that the power switch is off, that the power cord is not plugged in, and that the projector is adequately cooled.

To avoid losing, please fasten the lens cover to the projector using the strap.

- 1. Slowly turn over the projector, so that the bottom is facing up.
- 2. Fix the strap to the strap ring of projector.



3. Fix the strap to the strap ring of lens cover.



4. Attach the lens cover to the lens of projector, and slowly turn over the projector, so that the top is facing up.

#### **Putting batteries**

⚠WARNING ► Always handle the batteries with care and use them only as directed. Improper use may result in battery explosion, cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.

- Be sure to use only the batteries specified. Do not use batteries of different types at the same time. Do not use a new battery with used one.
- Make sure the plus and minus terminals are correctly aligned when loading a battery.
- Keep a battery away from children and pets.
- Do not recharge, short circuit, solder or disassemble a battery.
- Do not allow a battery in a fire or water. Keep batteries in a dark, cool and dry place.
- Do not give the battery a physical impact.
- If you observe a leakage of a battery, wipe out the flower and then replace a battery. If the flower adheres your body or clothes, rinse well with water immediately.
- Obey the local laws on disposing a battery.

To use the remote control, please load the batteries. Whenever the remote control starts to malfunction, replace the batteries. If you won't use the remote control for an extended period, remove the batteries from the remote control and store them in a safe place.

Remove the battery cover.
 Slide back and remove the battery cover in the direction of the arrow.



Take old batteries out and/or put new batteries in.When putting in batteries, align and insert the two AA batteries according to their plus and minus terminals as indicated in the remote control.



3. Close the battery cover.

Replace the battery cover in the direction of the arrow and snap it back into place.

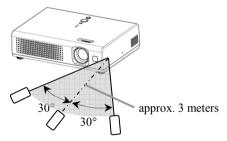


#### Using the remote control

⚠CAUTION ► Be careful in handling the remote control. Incorrect handling could cause damage or malfunction.

- Do not drop or otherwise expose the remote control to physical impact.
- Do not get the remote control wet or place it on wet objects.
- Remove the batteries from the remote control and store them in a safe place if you won't be using the remote control for an extended period.
- Replace the batteries whenever the remote control starts to malfunction.
- When strong lights such as direct sunlight or light from an extremely close range (such as from an inverter fluorescent lamp) hit the projector's remote sensor, the remote control may not function correctly. Adjust the direction of the projector to keep light from directly hitting the projector's remote sensor.

The remote control works with the projector's remote sensor.



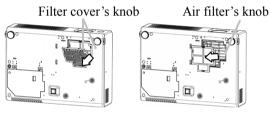
- The range of the remote sensor is 3 meters with a 60 degree range (30 degrees to the left and right of the remote sensor).
- Also a remote signal reflected in the screen etc. may be available. If it is difficult to send a remote signal to the sensor directly, please try.
- Since the remote control uses infrared light to send signals to the projector (Class1 LED), be sure to use the remote control in an area free from obstacles that could block the remote control's output signal to the projector.

#### About the filter cover for bottom-up use

⚠WARNING ► Do not replace the filter cover and/or air filter during use or immediately after use. Handling while the projector is in a high temperature could cause a burn and/or malfunction to the projector. Before operating, make sure that the power switch is off, that the power cord is not plugged in, and that the projector is cooled adequately.

When the projector is installed bottom up, please use the accessory filter cover for bottom-up use. It is higher than usual filter cover, to keep the space for intake ventilation. Please change in the following procedure.

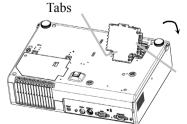
- Disconnect all the connectors and adapters that were connected to the projector's ports. Then slowly turn the projector so that the lens-side is facing up. Please be careful for a projector not to fall. While the projector is placed lens-side up, hold the projector.
- 2. Remove the filter cover and the air filter. Hold the knobs while pulling out it.



- 3. Slowly turn the projector so that the bottom is facing up.
- 4. Set a new or cleaned air filter to the filter cover for bottom-up use. Make the claws slide along the rail, and set the air filter into place.



5. Interlocking the tabs, snap the filter cover for bottom-up use into place.



Filter cover for bottom-up use (with an air filter)

## Setting up

⚠WARNING ► Place the projector in a stable position horizontally. A fall or a turnover could cause an injury and/or damage to the projector. Then using a damaged projector could result in a fire and/or an electric shock.

- Don't place the projector on an unstable, slant or vibrant surface such as a wobbly or inclined stand.
- Do not place the projector in the side/front/rear-up position, except care of the air filter.
- For the projector installed bottom-up, use the accessory filter cover for bottom-up use. And in the case of a ceiling installation or the like, contact your dealer before installation.
- ▶ Place the projection in a cool place, and pay attention enough to ventilation. The high temperature of the projector could cause a fire, a burn and/or malfunction to the projector.
- Don't stop up, block and cover the projector's vents.
- Keep a space of 30 cm or more between the sides and other objects such as walls.
- Don't place the projector on a metallic thing or anything weak in heat.
- Don't place the projector on a carpet, cushion or bedding.
- Don't place the projector in direct sunlight or near a hot object such as heater.
- Put nothing about lens and vents of the projector. Put nothing on the projector.
- Put nothing that is sucked or sticks to the bottom of projector. This projector also has intake vents on the bottom of the unit.
- ▶ Do not place the projector on a wet surface. Damping the projector or inserting liquid in the projector could cause a fire, an electric shock and/or malfunction to the projector.
- Don't place the projector in a bathroom or the outdoors.
- Put nothing containing the liquid near the projector.

△CAUTION ► Avoid a smoky, humid or dusty place. Placing the projector in such place could cause a fire, an electric shock and/or malfunction to the projector.

- Don't place the projector near a humidifier, a smoking space or a kitchen.
- Put nothing containing liquid near the projector.
- ► Adjust the direction of the projector to keep light from directly hitting the projector's remote sensor.

### Arrangement

Refer to the illustrations and tables below to determine the screen size and projection distance.

The values shown in the table are calculated ( $\pm 3\%$ ) for a

full size screen: 1024x768

#### At 4:3 screen



(a) Screen size [inch (m)]		(b) Projection distance		(c) Screen height [cm (inch)]				
	` ''	[m (	[m (inch)]		down		up	
40	(1.0)	1.3	(53)	8.7	(3)	52.3	(21)	
50	(1.3)	1.7	(66)	10.9	(4)	65.3	(26)	
60	(1.5)	2.0	(80)	13.1	(5)	78.4	(31)	
70	(1.8)	2.4	(93)	15.2	(6)	91.4	(36)	
80	(2.0)	2.7	(107)	17.4	(7)	104.5	(41)	
90	(2.3)	3.1	(121)	19.6	(8)	117.6	(46)	
100	(2.5)	3.4	(134)	21.8	(9)	130.6	(51)	
120	(3.0)	4.1	(161)	26.1	(10)	156.8	(62)	
150	(3.8)	5.1	(202)	32.7	(13)	195.9	(77)	
200	(5.1)	6.8	(269)	43.5	(17)	261.3	(103)	

#### At 16:9 screen



(a) Screen size [inch (m)]		(b) Projection distance [m (inch)]		(c) Screen height [cm (inch)] down up			
40	(1.0)	1.5	(58)	1.2	(0)	48.6	(19)
50	(1.3)	1.8	(72)	1.5	(1)	60.8	(24)
60	(1.5)	2.2	(87)	1.8	(1)	72.9	(29)
70	(1.8)	2.6	(102)	2.1	(1)	85.1	(34)
80	(2.0)	3.0	(117)	2.4	(1)	97.2	(38)
90	(2.3)	3.3	(131)	2.7	(1)	109.4	(43)
100	(2.5)	3.7	(146)	3.0	(1)	121.6	(48)
120	(3.0)	4.5	(176)	3.6	(1)	145.9	(57)
150	(3.8)	5.6	(220)	4.4	(2)	182.3	(72)
200	(5.1)	7.5	(294)	5.9	(2)	243.1	(96)

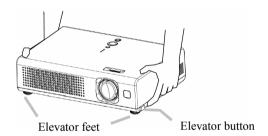
### Adjusting the projector's elevator

⚠WARNING ► Do not adjust the projector's elevator during use or immediately after use. Handling while the projector is in a high temperature could cause a burn and/or malfunction to the projector. Before operating, make sure that the power switch is off, that the power cord is not plugged in, and that the projector is cool adequately.

⚠CAUTION ► If you press the elevator button without holding the projector, the projector might crash down, overturn, smash your fingers and possibly result in malfunction. To prevent damaging the projector and injuring yourself, always hold the projector whenever using the elevator buttons to adjust the elevator feet.

► Except for inclining by the elevator feet adjustment, place the projector horizontally.

You can use the elevator feet to make adjustments if the surface on which you need to set the projector is uneven or if you otherwise need to adjust the angle of projection. The adjustment range of the elevator feet is 0 to 9 degrees.



- 1. Press and hold in the elevator buttons while holding the projector. The elevator buttons and the elevator feet are on the both sides.
- 2. Raise or lower the projector to the desired height and the release the elevator buttons.
  - When you release the elevator buttons, the elevator feet will lock into position.
- 3. As necessary, you can also finely adjust the height of the projector by twisting the elevator feet by hand.

### **Connecting your devices**

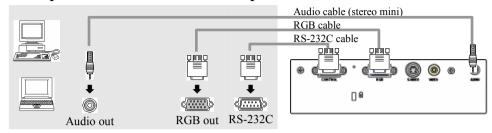
- ⚠CAUTION ► Turn off all devices prior to connecting them to the projector. Attempting to connect a live device to the projector may generate extremely loud noises or other abnormalities that may result in malfunction and/or damage to the device and/or projector.
- ▶ Use the accessory cable or a designated-type cable for the connection. Some cables have to be used with core set. A too long cable may cause a certain picture degradation. Please consult with your dealer for details. For cables that have a core only at one end, connect the core to the projector.
- ► Make sure that you connect devices to the correct port. Incorrect connection may result in malfunction and/or damage to the device and/or projector.
- NOTE Whenever attempting to connect a laptop computer to the projector, be sure to activate the laptop's RGB external image output (set the laptop to CRT display or to simultaneous LCD and CRT display). For details on how this is done, please refer to the instruction manual of the corresponding laptop computer.
- Secure the screws on the connectors and tighten.
- Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
- For some RGB signal modes, the optional Mac adapter is necessary.
- When the image resolution is changed on a computer, depending on an input, automatic adjust function may take some time and may not be completed. In this case, you may not be able to see a check box to select "Yes/No" for the new resolution on Windows. Then the resolution will go back to the original. It might be recommended to use other CRT or LCD monitors to change the resolution.

#### About Plug-and-Play capability

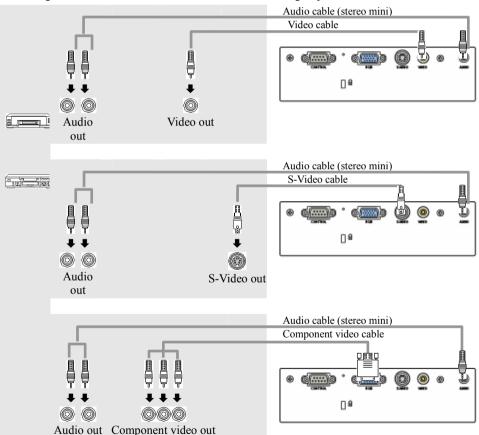
Plug-and-Play is a system composed of the computer, its operating system and peripheral equipment (i.e. display devices). This projector is compatible with VESA DDC 2B. Plug-and-Play can be achieved by connecting this projector to computers that are VESA DDC (display data channel) compatible.

- Please take advantage of this function by connecting the accessory RGB cable to the RGB port (DDC 2B compatible). Plug-and-Play may not work properly if any other type of connection is attempted.
- Please use the standard drivers in your computer as this projector is a Plug-and-Play monitor.

#### Examples of connection with a computer



### Examples of connection with a VCR/DVD player

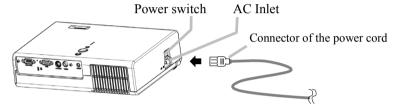


### **Connecting power supply**

<u>^</u>WARNING ▶ Please use extra caution when connecting the power cord as incorrect or faulty connections may result in fire and/or electrical shock.

- Only use the power cord that came with the projector. If it is damaged, contact your dealer to newly get correct one.
- Only plug the power cord into an outlet rated for use with the power cord's specified voltage range.
- Never modify the power cord. Never attempt to defeat the ground connection of the three-pronged plug.

Before connecting, make sure that the power switch is the OFF position (pressed the side marked "O").



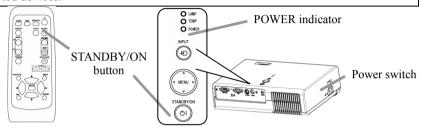
- 1. Connect the connector of the power cord to the AC inlet of the projector.
- 2. Firmly plug the power cord's plug into the outlet.

## Power on/off

## Turning on the power

⚠WARNING ► When the power is on, a strong light is emitted. Do not look into the lens or vents of the projector.

NOTE • Turn the power on in right order. Please power on the projector before the connected devices.



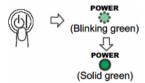
- 1. Make sure that the power cord is firmly and correctly connected to the projector and outlet.
- 2. Open the lens cover, and set the power switch to the ON position.

  The power indicator will light to solid orange. Then wait several seconds because buttons may not function for these several seconds.



3. Press the STANDBY/ON button on the projector or remote control.

The projector lamp will light up and the POWER indicator will begin blinking green. When the power is completely on, the indicator will stop blinking light green.



To display the picture, select an input signal according to the section "Selecting an input signal" ( $\square 18$ ).

### **Turning off the power**

NOTE • Turn the power off in right order. Please power off the projector after the connected devices.

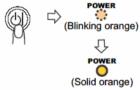
- Except for an emergency, whenever you turn the projector off, obey the procedure of the following "Turning off the power", and do not disconnect the power cord until the procedure is completed. Neglect causes a damage of the electrode and un-lighting of the lamp.
- This Projector is controlled by an internal microprocessor. Under certain exceptional circumstances, the projector may not operate correctly even for turning off the power. In such a case, please push the restart switch (44, 17) by using a pin or similar. After making sure that the power indicator lights to solid orange, set the power switch to the OFF position. Only push the restart switch in these exceptional instances.
- When a power supply is shut off with a power failure or the restart switch, before turning on again, make the projector cool down at least 10 minutes without operating.
- Press the STANDBY/ON button on the projector or remote control.
   The message "Power off?" will appear on the screen for approximately 5 seconds



2. Press the STANDBY/ON button on the projector or remote control again while the message is visible.

The projector lamp will go off, and the POWER indicator will begin blinking orange.

Then the POWER indicator will stop blinking and light to solid orange when the lamp cooling is complete.



3. Make sure that the power indicator lights to solid orange, set the power switch to the OFF position. Do not set the power switch to the OFF position while the POWER indicator is green or blinking.

The POWER indicator will go off.



4. Close the lens cover. For safety purposes, disconnect the power cord if the projector is not to be used for prolonged periods of time.

## Operating

#### Adjusting the volume

1. Press the VOLUME button on the remote control.

A dialog will appear on the screen to aid you in adjusting the volume.

2. Use the cursor buttons  $\triangle/\nabla$  to adjust the volume.

To close the dialog and complete the operation, press the VOLUME button again. Even if you don't do anything, the dialog will automatically disappear after a few seconds.

## Temporarily muting the sound

1. Press the MUTE button on the remote control.

A dialog will appear on the screen indicating that you have muted the sound.

To restore the sound, press the MUTE button or VOLIME button.

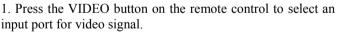
Even if you don't do anything, the dialog will automatically disappear after a few seconds.

## Selecting an input signal

1. Press the INPUT button on the projector.

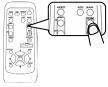
Each time you press the button, the projector switches its input port as below.

1. Press the RGB button on the remote control to select the RGB port.

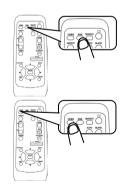


Each time you press the button, the projector switches its video input port as below.

• If the VIDEO button is pushed (when switching from RGB to VIDEO signals) when TURN ON is selected for the AUTO SEARCH item in the OPTION menu (438), the projector will check the S-VODEO port at first. If no input is detected at the S-VIDEO port, projector will check the VIDEO port automatically.

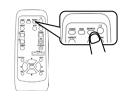






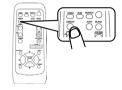
### Searching an input signal

Press the SEARCH button on the remote control.
 The projector will begin to check its input ports in order to find any input signals. Then when an input is found, the projector will stop searching and display the image. If no signal is found, the projector will return to the state selected before the operation.



### Selecting an aspect ratio

 Press the ASPECT button on the remote control.
 Each time you press the button, the projector switches the modes for aspect ratio in turn.

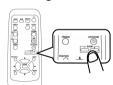


At a video signal / no signal

- The NORMAL mode keeps the original aspect ratio of the signal.
- At a HDTV component video signal of 1125i (1080i) or 750p (720p), only 16:9 mode can be selected.
- Performing the automatic adjustment initializes the aspect ratio setting.

## Adjusting the zoom (magnifying power)

- Press the ZOOM +/- button on the remote control.
   A dialog will appear on the screen to aid you in adjusting the zoom.
- Use the cursor buttons +/- to adjust the zoom.
   To close the dialog and complete this operation, don't perform operation for a few seconds.



## Adjusting the focus

1. Use the focus ring to focus on the picture.



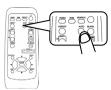
### Using the automatic adjustment feature

1 Press the AUTO button on the remote control

At a RGB signal

The vertical position, the horizontal position, the clock phase and horizontal size will be automatically adjusted.

Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting.



## At a video signal

The video format best suited for the respective input signal will be selected automatically.

This function is available only when the AUTO mode is selected to the item VIDEO FORMAT of INPUT menu (432). For a component video signal, the signal type is identified automatically, independently of this function.

• The automatic adjustment operation requires approximately 10 seconds. Also please note that it may not function correctly with some input.

## Adjusting the position

1. Press the POSITION button on the remote control.

The "POSITION" indication will appear on the screen.

2. Use the cursor buttons  $\triangle/\nabla/\blacktriangleleft/\triangleright$  to adjust the picture position.

When you want to reset the operation, press the RESET button on the remote control during the operation.

To complete this operation, press the POSITION button again. Even if you don't do anything, the dialog will automatically disappear after a few seconds.

• When this function is performed at a video signal, a certain extra such as a line may appear outside a picture.

## Correcting the keystone distortions

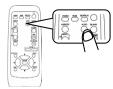
1. Press the KEYSTONE button on the remote control.

A dialog will appear on the screen to aid you in correcting the distortion.

2. Use the cursor buttons  $\triangle/\nabla$  to correct the distortion.

To close the dialog and complete this operation, press the KEYSTONE button again. Even if you don't do anything, the dialog will automatically disappear after a few seconds

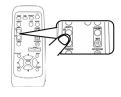
- This function may not be work well with some input.
- The adjustable range for correcting will vary among inputs.



### Using the partial magnify feature

1. Press the ON button of MAGNIFY on the remote control.

The "MAGNIFY" indication will appear on the screen (although the indication will disappear after several seconds with no operation), and the projector will enter the MAGNIFY mode



2. Use the cursor buttons  $\triangle/\nabla$  to adjust the zoom level.

To move the zoom area, press the POSITION button in the MAGNIFY mode, the use the cursor buttons  $\blacktriangle/\blacktriangledown/\blacktriangleleft/\blacktriangleright$  to move the area. And to finalize the zoom area, press the POSITION button again.

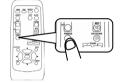
To exit the MAGNIFY mode and restore the screen to normal, press the OFF button of MAGNIFY on the remote control.

- The projector automatically exits the MAGNIFY mode when the input signal changes, or when an operation of changing the display condition (automatic adjustment, etc.) is executed.
- Although in the MAGNIFY mode, the keystone distortion condition may vary, it will be restored when the projector exit the MAGNIFY mode.

#### Freezing the screen

1. Press the FREEZE button on the remote control.

The "FREEZE" indication will appear on the screen, and the projector will enter the FREEZE mode.



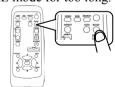
To exit the FREEZE mode and restore the screen to normal, press the FREEZE button again.

- The projector automatically exits the FREEZE mode when the input signal changes, or when one of the projector's buttons or the remote control buttons of STANDBY/ON, SEARCH, RGB, VIDEO, BLANK, AUTO, ASPECT, VOLUME, MUTE, KEYSTONE, POSITION and MENU is pressed.
- If the projector continues projecting a still image for long time, the LCD panel might possibly be printed. Do not leave the projector in FREEZE mode for too long.

## Temporarily blanking the screen

1. Press the BLANK button on the remote control.

The blank screen will be displayed instead of the screen of input signal. Please refer to the item BLANK of section SCREEN menu (435).



To remove the blank screen and return to the input signal screen, press the BLANK button again.

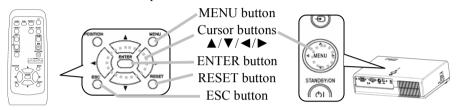
• The projector automatically returns to the input signal screen when the input signal changes, or when one of the projector's buttons or the remote control buttons are pressed.

## Multifunctional setting

NOTE • Regardless of description of this manual, these functions may not work correctly with some input.

### Using the menu function

This projector has the following menus: PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION and EASY MENU. Each of these menus is operated using the same methods. The basic operations of these menus are as follows.



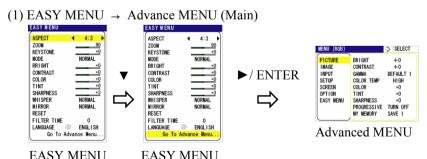
#### 1. To display a menu

Press the MENU button on the remote control or one of the cursor buttons  $\blacktriangle/\blacktriangledown/\blacktriangleleft/\blacktriangleright$  on the projector. The Advanced MENU or EASY MENU will appear.

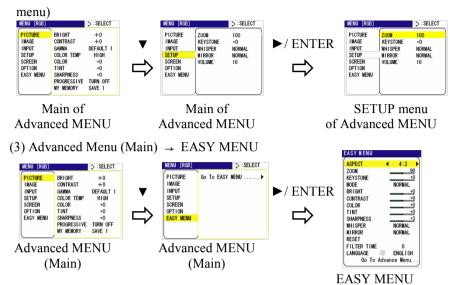
#### 2. To choose the target menu

Point at one of choices on the menu using the cursor buttons  $\blacktriangle/\blacktriangledown$ , then press the cursor button  $\blacktriangleright$  or the ENTER button.

At the Advance menu, when some menu is chosen already and you want to choose other menu, please return to the main menu beforehand, using the cursor button ◀ or the ESC button before choosing the menu.



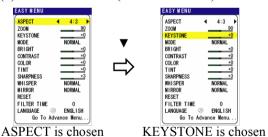
(2) Main of Advanced MENU Main → one of Advanced Menus (ex. SETUP



#### 3. To choose the target item

Point at one of choices on the menu using the cursor buttons  $\blacktriangle/\blacktriangledown$ . At an Advanced menu, then press the cursor button  $\blacktriangleright$  or the ENTER button.

(1) At EASY MENU (ex. KEYSTONE)



(2) At Advanced Menu (ex. KEYSTONE)



#### 4. To operate

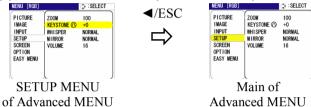
Please follow of the mention concerned in each. In general,

- (1) At EASY MENU, use the cursor buttons **◄/▶** to operate.
- (2) At Advanced MENU, use the cursor buttons  $\blacktriangle/\blacktriangledown$ , then press the cursor button ▶ or the ENTER button.

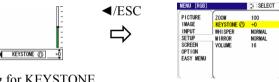
#### 5. To return to the previous menu

Press the cursor button ◀ or the ESC button.

(1) One of Advanced Menus (ex. SETUP menu) → Main of Advanced MENU



(2) Dialogs for operation (ex. KEYSTONE) → Advanced MENU



Dialog for KEYSTONE

SETUP menu

RESET

#### 6. To reset

(1) Each item

Press the RESET button while operating.

(2) Items of EASY MENU (at a time)

Point at "RESET" on the menu using the cursor buttons  $\triangle/\nabla$ , the press the cursor button ▶ or the ENTER button. The dialog for reset will appear.

Point at "RESET" on the dialog using the cursor button ▲.

(3) Items of an Advanced MENU

Press the RESET button while pointing the menu name. The dialog for reset will appear.

Point at "RESET" on the dialog using the cursor button ▲.

Note that items whose functions are performed simultaneously with operation (ex. LANGUAGE, H PHASE etc.) aren't reset.

#### 7. To close the menu

Press the MENU button again.

Even if you don't do anything, the operation will complete and the menu will disappear automatically after about 10 seconds.

#### **EASY MENU**

With the EASY MENU, items shown in the table below can be performed.

Choose an item using the cursor buttons  $\blacktriangle/\blacktriangledown$  on the projector or remote control. Then perform it referring to the following table.



Item		GO 10 Advance Menu
See the item ASPECT of section IMAGE menu. (□19, 30)  ZOOM  Using the buttons ◀/▶ adjusts the zoom. See the item ASPECT of section SETUP menu. (□19, 34)  KEYSTONE  Using the buttons ◀/▶ corrects the keystone distortion. See the item KEYSTONE of section SETUP menu. (□20,34)  MODE  Using the buttons ◀/▶ switches the mode of picture type. The modes of picture type are combinations of a mode of GAMMA (□27) and a mode of COLOR TEMP (□28). Choose a suitable mode according to the projected source.  NORMAL ⇔ CINEMA ⇔ DYNAMIC  ① NORMAL: (COLOR TEMP=MIDDLE)+(GAMMA=#1 DEFAULT)  DYNAMIC: (COLOR TEMP=LOW)+(GAMMA=#2 DEFAULT)  DYNAMIC: (COLOR TEMP=HIGH)+(GAMMA=#3 DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT  Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□27)  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the starpness.	Item	Description
ZOOM	ASPECT	Using the buttons <b>◄/▶</b> switches the mode for aspect ratio.
See the item ASPECT of section SETUP menu. (□19, 34)  KEYSTONE  Using the buttons ◀/▶ corrects the keystone distortion.  See the item KEYSTONE of section SETUP menu. (□20,34)  WODE  Using the buttons ◀/▶ switches the mode of picture type. The modes of picture type are combinations of a mode of GAMMA (□27) and a mode of COLOR TEMP (□28). Choose a suitable mode according to the projected source.  NORMAL ⇔ CINEMA ⇔ DYNAMIC  □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□		See the item ASPECT of section IMAGE menu. (419, 30)
Weight State   Using the buttons	ZOOM	Using the buttons <b>◄/▶</b> adjusts the zoom.
See the item KEYSTONE of section SÉTUP menu. (□20,34)  MODE  Using the buttons ◀/▶ switches the mode of picture type. The modes of picture type are combinations of a mode of GAMMA (□27) and a mode of COLOR TEMP (□28). Choose a suitable mode according to the projected source.  NORMAL ⇔ CINEMA ⇔ DYNAMIC  \[ \begin{align*} \text{VORMAL:} \text{COLOR TEMP=MIDDLE} + (GAMMA=#1 DEFAULT) \text{DEFAULT}) \text{CINEMA:} \text{(COLOR TEMP=LOW) + (GAMMA=#2 DEFAULT)} \text{DYNAMIC:} \text{(COLOR TEMP=HIGH) + (GAMMA=#3 DEFAULT)} \text{DYNAMIC:} \text{USITOM": \text{VWent the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM": \text{Using the buttons ◀/▶ adjusts the brightness.} \text{See the item BRIGHT of section PICTURE menu. (□27)} \text{CONTRAST} \text{Using the buttons ◀/▶ adjusts the contrast.} \text{See the item COLOR of section PICTURE menu. (□27)} \text{COLOR} \text{Using the buttons ◀/▶ adjusts the strength of whole color.} \text{See the item COLOR of section PICTURE menu. (□28)} \text{• This item can be chosen only at a video signal.} \text{Using the buttons ◀/▶ adjusts the tint.} \text{See the item TINT of section PICTURE menu. (□28)} \text{• This item can be chosen only at a video signal.} \text{SHARPNESS} \text{Using the buttons ◀/▶ adjusts the sharpness.}		See the item ASPECT of section SETUP menu. (419, 34)
MODE  Using the buttons ◀/▶ switches the mode of picture type. The modes of picture type are combinations of a mode of GAMMA (□27) and a mode of COLOR TEMP (□28). Choose a suitable mode according to the projected source.  NORMAL ⇔ CINEMA ⇔ DYNAMIC  NORMAL: (COLOR TEMP = MIDDLE) + (GAMMA = #1 DEFAULT)  CINEMA: (COLOR TEMP = LOW) + (GAMMA = #2 DEFAULT)  DYNAMIC: (COLOR TEMP = HIGH) + (GAMMA = #3 DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT  Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◀/▶ adjusts the strength of whole color. See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.	KEYSTONE	
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(□27) and a mode of COLOR TEMP (□28). Choose a suitable mode according to the projected source.  NORMAL ⇔ CINEMA ⇔ DYNAMIC  □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	MODE	
mode according to the projected source.  NORMAL ⇔ CINEMA ⇔ DYNAMIC  ①  NORMAL: (COLOR TEMP=MIDDLE) + (GAMMA=#1 DEFAULT) CINEMA: (COLOR TEMP=LOW) + (GAMMA=#2 DEFAULT) DYNAMIC: (COLOR TEMP=HIGH) + (GAMMA=#3 DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT Using the buttons ◄/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST Using the buttons ◄/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□27)  COLOR Using the buttons ◄/▶ adjusts the tint. See the item COLOR of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  SHARPNESS Using the buttons ◄/▶ adjusts the sharpness.		modes of picture type are combinations of a mode of GAMMA
NORMAL ⇔ CINEMA ⇔ DYNAMIC  ①  NORMAL: (COLOR TEMP=MIDDLE) + (GAMMA=#1 DEFAULT) CINEMA: (COLOR TEMP=LOW) + (GAMMA=#2 DEFAULT) DYNAMIC: (COLOR TEMP=HIGH) + (GAMMA=#3 DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT  Using the buttons ◄/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◄/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□27)  COLOR  Using the buttons ◄/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  TINT  Using the buttons ◄/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◄/▶ adjusts the sharpness.		
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DEFAULT) CINEMA: (COLOR TEMP = LOW) + (GAMMA = #2 DEFAULT) DYNAMIC: (COLOR TEMP = HIGH) + (GAMMA = #3 DEFAULT) • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST Using the buttons ◀/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  TINT Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  SHARPNESS Using the buttons ◀/▶ adjusts the sharpness.		
CINEMA: (COLOR TEMP = LOW) + (GAMMA = #2 DEFAULT)  DYNAMIC: (COLOR TEMP = HIGH) + (GAMMA = #3  DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT  Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◀/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		NORMAL: (COLOR TEMP=MIDDLE)+(GAMMA=#1
DYNAMIC: (COLOR TEMP=HIGH)+(GAMMA=#3 DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT Using the buttons ◄/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST Using the buttons ◄/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR Using the buttons ◄/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT Using the buttons ◄/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS Using the buttons ◄/▶ adjusts the sharpness.		DEFAULT)
DEFAULT)  • When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT  Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◀/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		
<ul> <li>• When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".</li> <li>BRIGHT Using the buttons ◄/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)</li> <li>CONTRAST Using the buttons ◄/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)</li> <li>COLOR Using the buttons ◄/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)</li> <li>• This item can be chosen only at a video signal.</li> <li>TINT Using the buttons ◄/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)</li> <li>• This item can be chosen only at a video signal.</li> <li>SHARPNESS Using the buttons ◄/▶ adjusts the sharpness.</li> </ul>		DYNAMIC: (COLOR TEMP=HIGH) + (GAMMA=#3
from pre-assigned modes above, the display on the menu for the MODE is "CUSTOM".  BRIGHT  Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◀/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		DEFAULT)
MODE is "CUSTOM".  BRIGHT  Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◀/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		• When the combination of GAMMA and COLOR TEMP differs
BRIGHT Using the buttons ◀/▶ adjusts the brightness. See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST Using the buttons ◀/▶ adjusts the contrast. See the item CONTRAST of section PICTURE menu. (□27)  COLOR Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS Using the buttons ◀/▶ adjusts the sharpness.		from pre-assigned modes above, the display on the menu for the
See the item BRIGHT of section PICTURE menu. (□27)  CONTRAST  Using the buttons ◀/▶ adjusts the contrast.  See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color.  See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint.  See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		MODE is "CUSTOM".
CONTRAST  Using the buttons ◀/▶ adjusts the contrast.  See the item CONTRAST of section PICTURE menu. (□27)  Using the buttons ◀/▶ adjusts the strength of whole color.  See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  Using the buttons ◀/▶ adjusts the tint.  See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.	BRIGHT	Using the buttons <b>◄/▶</b> adjusts the brightness.
See the item CONTRAST of section PICTURE menu. (□27)  COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		See the item BRIGHT of section PICTURE menu. (427)
COLOR  Using the buttons ◀/▶ adjusts the strength of whole color. See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.	CONTRAST	Using the buttons <b>◄/▶</b> adjusts the contrast.
See the item COLOR of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint.  See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.		
• This item can be chosen only at a video signal.  TINT  Using the buttons ◀/▶ adjusts the tint.  See the item TINT of section PICTURE menu. (□28)  • This item can be chosen only at a video signal.  SHARPNESS  Using the buttons ◀/▶ adjusts the sharpness.	COLOR	
TINT Using the buttons ◀/▶ adjusts the tint. See the item TINT of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  SHARPNESS Using the buttons ◀/▶ adjusts the sharpness.		See the item COLOR of section PICTURE menu. (428)
See the item TINT of section PICTURE menu. (□28) • This item can be chosen only at a video signal.  SHARPNESS Using the buttons		
• This item can be chosen only at a video signal.  SHARPNESS Using the buttons ◀/▶ adjusts the sharpness.	TINT	
SHARPNESS Using the buttons <b>◄/▶</b> adjusts the sharpness.		
		This item can be chosen only at a video signal.
See the item SHARPNESS of section PICTURE menu. (\$\omega\$28).	SHARPNESS	
		See the item SHARPNESS of section PICTURE menu. (28).

#### EASY MENU (continued)

Item	Description
WHISPER	Using the buttons <b>◄/▶</b> turns off/on the whisper mode.
	See the item WHISPER of section SETUP menu. (234)
MIRROR	Using the buttons <b>◄/▶</b> switches the mode for mirror status.
	See the item MIRROR of section SETUP menu. (434)
RESET	Performing this item resets all of the items of EASY MENU
	except FILTER TIME and LANGUAGE.
	Pressing the button ► displays a dialog to make sure. To perform
	reset, point at RESET using the button ▲. (□24)
FILTER TIME	Performing this item resets the filter timer which counts use time
	of air filter.
	See the item FILTER TIME of section OPTION menu. (239)
LANGUAGE	Using the buttons <b>◄/▶</b> switches the language of menu.
	See the item LANGUAGE of section SCREEN menu. (435)
Go To	Pointing at the "Go To Advanced Menu" and pressing the button
Advanced	► changes the EASY MENU into the Advanced MENU. (□22)
Menu	Performs to use the menu of PICTURE, IMAGE, INPUT,
	SETUP, SCREEN or OPTION.

#### PICTURE menu

With the PICTURE menu, items shown in the table below can be performed.

Choose an item using the cursor buttons  $\triangle/\nabla$  on the projector or remote control, and press the cursor button  $\triangleright$  on the projector or remote control, or the ENTER button on the remote control to progress. Then perform it referring to the following table.



Item	Description
BRIGHT	Using the buttons ▲/▼ adjusts the brightness.
	Light ↔ Dark
CONTRAST	Using the buttons ▲/▼ adjusts the contrast.
	Strong ↔ Weak
GAMMA	Using the buttons ▲/▼ switches the GAMMA
	mode.  #1 DEFAULT AN #1 CUSTOM AN #2 DEFAULT.
	#1 DEFAULT \$\iff #1 CUSTOM \$\iff #2 DEFAULT \( \tau_{\psi} \) OBFAULT \( \tau_{\psi} \) OBFAULT \( \tau_{\psi} \) OBFAULT
	#3 CUSTOM⇔#3 DEFAULT⇔#2 CUSTOM
	To adjust #1 CUSTOM, #2 CUSTOM or #3 CUSTOM
	Selecting a mode of CUSTOM and then
	pressing the button ▶ or the ENTER
	button displays a dialog to aid you in
	adjusting the mode.
	This function is useful when you want to change the brightness of particular tones.
	Choose an item using the buttons <b>◄/▶</b> ,
	and adjust the level using the buttons
	▲/▼.
	Using a test pattern
	You can display a test pattern for checking the effect of your
	adjustment by pressing the ENTER button. Each time you press the
	ENTER button, the pattern changes as below.  No pattern ⇒ Gray scale of 9 steps
	1 to pattern - Gray scale of 7 steps
	Ramp   Gray scale of 15 steps
	Eight of equalizing bars corresponds to eight of tone level of test
	pattern except the darkest in the left end. If you want to adjust the
	2nd tone from left end on the test pattern, use the equalizing adjustment bar "1". The darkest tone at the left end of the test pattern
	cannot be controlled with any of equalizing adjustment bar.

#### PICTURE menu (continued)

Item	Description
COLOR TEMP	Using the buttons ▲/▼ switches the mode of color temperature.  HIGH ⇔ MIDDLE         CUSTOM □ INITIAL COLOR   COLOR
	To adjust CUSTOM  Selecting the CUSTOM and then pressing the button ▶ or the ENTER button displays a dialog to aid you in adjusting the OFFSET and/or GAIN of CUSTOM mode.  OFFSET adjustments change the color intensity on the whole tones of the test pattern.  GAIN adjustments mainly affect color intensity on the brighter tones of the test pattern.  Choose an item using the buttons ◄/▶, and adjust the level using the buttons ▲/▼.
	Using a test pattern You can display a test pattern for checking the effect of your adjustment by pressing the ENTER button. Each time you press the ENTER button, the pattern changes as below.  No pattern ⇒ Gray scale of 9 steps        Ramp ⇔ Gray scale of 15 steps
COLOR	Using the buttons ▲/▼ adjusts the strength of whole color.  Strong ↔ Weak  • This item can be chosen only at a video signal.
TINT	Using the buttons ▲/▼ adjusts the tint.  Green ↔ Red  • This item can be chosen only at a video signal.
SHARPNESS	Using the buttons ▲/▼ adjusts the sharpness.  Strong ↔ Weak

#### PICTURE menu (continued)

Item	Description
PROGRESSIVE	Using the buttons ▲/▼ switches the progressive mode.
	TV ⇔ FILM ⇔ TURN OFF
	ÛÛ
	• This function performs only at an interlaced signal of a VIDEO input, a S-VIDEO input or a component video input of 525i (480i) or 625i (576i) signal.
	• When the TV or FILM is selected, the screen image will be crisper. The FILM mode is adaptable to the 2-3 Pull-Down system to the conversion. (not adaptable to the 2-2 Pull-Down
	system) But these may cause a certain defect (for example, jagged line) of the picture at a quick moving object. In such a case, please select the TURN OFF, even though the screen
	image may lose the crisp.
MY MEMORY	Choosing a mode of MY MEMORY using the buttons ▲/▼ and then pressing the button ▶ or the ENTER button performs each function.
	LOAD1 ⇔ LOAD2 ⇔ LOAD3 ⇔ LOAD4
	\$
	SAVE4  SAVE3  SAVE2  SAVE1
	This projector has 4 numbered memories for adjustment data. Performing the LOAD1, LOAD2, LOAD3 or LOAD4 loads the data on the memory whose number corresponds with the command's number, and adjusts the picture automatically depending on the data.  Performing the SAVE1, SAVE2, SAVE3 or SAVE4 puts the
	current adjustment data on the memory whose number corresponds with the command's number.

#### **IMAGE** menu

With the IMAGE menu, items shown in the table below can be performed.

Choose an item using the cursor buttons  $\blacktriangle/\blacktriangledown$  on the projector or remote control, and press the cursor button  $\blacktriangleright$  on the projector or remote control, or the ENTER button on the remote control to progress. Then perform it referring to the following table.



the following tabl	·
Item	Description
ASPECT	Using the buttons <b>△</b> / <b>▼</b> switches the mode for aspect ratio.
	At a RGB signal
	4:3 ⇔ 16:9 ⇔ NORMAL
	Û=====Û
	At a video signal / no signal
	4:3 ⇔ 16:9
	Û <b></b> Û
	• The NORMAL mode keeps the original aspect ratio of the
	signal.
	• At a HDTV component video signal of 1125i (1080i) or 750p
	(720p), this item can't be chosen.
	• Performing the automatic adjustment initializes the aspect
	ratio setting.
OVER SCAN	Using the buttons $\blacktriangle/\blacktriangledown$ adjusts the over-scan ratio.
	Large (It reduces picture) ⇔ Small (It magnifies picture)
	• This item can be chosen only at a video signal.
	• When this adjustment is too large, certain degradation may
	appear at the frame area of the picture. In such a case, please
	adjust small.
V POSITION	Using the buttons $\triangle/\nabla$ adjusts the vertical position.
	Up ↔ Down
H POSITION	Using the buttons <b>△</b> / <b>▼</b> adjusts the horizontal position.
	Left ↔ Right
H PHASE	Using the buttons ▲/▼ adjusts the horizontal phase to
	eliminate flicker.
	Right ↔ Left
	• This item can be chosen only at a RGB signal or a component
	video signal (except 525i (480i) and 625i (576i)).

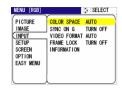
#### IMAGE menu (continued)

Item	Description
H SIZE	Using the buttons ▲/▼ adjusts the horizontal size.
	Large ↔ Small
	• This item can be chosen only at a RGB signal
	• When this adjustment is excessive, the picture may not be
	displayed correctly. In such a case, please reset the adjustment
	pressing the RESET button during this operation.
AUTO ADJUST	Choosing this item performs the automatic adjustment feature.
EXECUTE	At a RGB signal
	The vertical position, the horizontal position, the clock phase and horizontal size will be automatically adjusted.
	Make sure that the application window is set to its maximum
	size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting.
	At a video signal
	The video format best suited for the respective input signal will be selected automatically.
	This function is available only when the AUTO mode is
	selected to the item VIDEO FORMAT of INPUT menu. For a
	component video signal, the signal type is identified
	automatically, independently of this function.
	• The automatic adjustment operation requires approximately
	10 seconds. Also please note that it may not function correctly
	with some input.

### INPUT menu

With the INPUT menu, items shown in the table below can be performed.

Choose an item using the cursor buttons △/▼ on the projector or remote control, and press the cursor button ► on the projector or remote control, or the ENTER button on the remote control to progress. Then perform it referring to the following table.



the following tab	ic.
Item	Description
COLOR	Using the buttons <b>△</b> / <b>▼</b> switches the mode for color space.
SPACE	AUTO ⇔ RGB ⇔ SMPTE240 ⇔ REC709 ⇔ REC601
	û
	• This item can be chosen only at a RGB signal or a component
	video signal.
	• The AUTO mode automatically selects the optimum mode.
	• The AUTO operation may not work well at some signals. In
	such a case, it might be good to select the SMPTE240 or the
	REC709.
VIDEO	Using the buttons $\blacktriangle/\blacktriangledown$ switches the mode for video format.
FORMAT	AUTO ⇔ NTSC ⇔ PAL ⇔ SECAM
	<b>\$</b>
	N-PAL ⇔ M-PAL ⇔ NTSC4.43
	• This item performs only at a video signal from the VIDEO
	port or the S-VIDEO port. For a component video signal, the
	signal type is identified automatically, independently of this
	function.
	• The AUTO mode automatically selects the optimum mode.
	• The AUTO operation may not work well at some signals. If the
	picture becomes unstable (ex. an irregular picture, a color lack),
	please select the mode depending on the input signal.

## INPUT menu (continued)

Item	Description			
FRAME LOCK	Using the buttons <b>△</b> / <b>▼</b> turns the frame lock function on/off.			
	TURN ON ⇔ TURN OFF			
	• This item performs only at a RGB signal with vertical			
	frequency from 50 to 60 Hz.			
	When the TURN ON is selected, a moving picture is			
	displayed more smoothly.			
	• This function may cause a certain degradation of the picture.			
	In such a case, please select the TURN OFF.			
INFORMATION	Choosing this item displays a dialog titled "INPUT			
	INFORMATION". It shows the information about the current			
	input.			
	■ IMPUT - INFORMATION   RGB   S - VIDEO   SEVANGO   AUTO			
	• The "FRAME LOCK" message on the dialog means the			
	frame lock function is working. (433)			
	• This item can't be chosen at no signal.			

## **SETUP** menu

With the SETUP menu, items shown in the table below can be performed.

Choose an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ▶ on the projector or remote control, or the ENTER button on the remote control to progress. Then perform it referring to the following table.



the following tab	nie.		
Item	Description		
ZOOM	Using the buttons $\blacktriangle/\blacktriangledown$ adjusts the zoom (magnifying power).		
	Large ↔ Small		
KEYSTONE	Using the buttons ▲/▼ corrects the keystone distortion.		
	Upper in the data ↔ Lower in the data		
	<ul> <li>The adjustable range of this function will vary with the type of input signal. At some signals, this function may not work well.</li> <li>When the V:INVERT or the H&amp;V:INVERT is selected under the item MIRROR, if the projector screen is inclined or if the projector is angled downward, this function may not work correctly.</li> </ul>		
	• When the zoom adjustment is set to the TELE side, this correction may be excessive. This function should be used with zoom set to WIDE whenever possible.		
WHISPER	Using the buttons ▲/▼ turns off/on the whisper mode.  NORMAL ⇔ WHISPER  • When the WHISPER is selected, acoustic noise and screen brightness are reduced.		
MIRROR	Using the buttons ▲/▼ switches the mode for mirror status.  NORMAL ⇔ H:INVERT ⇔ V:INVERT ⇔ H&V:INVERT		
VOLUME	Using the buttons ▲/▼ adjusts the volume.  High ↔ Low		

### **SCREEN** menu

With the SCREEN menu, items shown in the table below can be performed.

Choose an item using the cursor buttons  $\blacktriangle/\blacktriangledown$  on the projector or remote control, and press the cursor button  $\blacktriangleright$  on the projector or remote control, or the ENTER button on the remote control to progress. Then perform it referring to the following table.



Item	Description			
LANGUAGE	Using the buttons <b>△</b> / <b>▼</b> switches the OSD (On Screen Display)			
Ernveerige	language.			
	ENGLISH ⇔ FRANÇAIS ⇔ DEUTSCH ⇔ ESPAÑOL			
	↑			
	ITALIANO ⇔ NORSK ⇔ NEDERLANDS ⇔ PORTUGUÊS 			
	□ ♥     日本語 ⇔ 简体中文 ⇔ 繁體中文 ⇔ 与 ⇒ SVENSKA   □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □			
	↓===================================			
MENU	Using the buttons $\blacktriangleleft/\triangleright/\triangle/\blacktriangledown$ adjusts the menu position.			
POSITION	To quit the operation, press the MENU button or keep no operation			
	for 10 seconds.			
OSD BRIGHT	Using the buttons ▲/▼ switches the brightness level of the OSD			
	(On Screen Display).			
	BRIGHT⇔DARK			
BLANK	Using the buttons ▲/▼ switches the mode for the blank screen.			
	The blank screen is the screen for the temporarily blanking feature			
	(□21). It is displayed by pressing the BLANK button.  MyScreen ⇔ ORIGINAL ⇔ BLUE ⇔ WHITE ⇔ BLACK			
	Myscreen ↔ Oktomal ↔ Blue ↔ White ↔ Black			
	MyScreen is the screen you can register a desired screen.			
	ORIGINAL screen is the existing standard screen. BLUE, WHITE			
	and BLACK are non-patterned (plain) screens in each color.			
	• To avoid remaining as an afterimage, the MyScreen and the			
	ORIGINAL screens will change to the BLACK screen after several			
	minutes.			
	• For the MyScreen, please refer to the item MyScreen. (236)			

### SCREEN menu (continued)

The unsu	Description  g the buttons ▲/▼ switches the mode for the start up screen.  start up screen is the screen displayed when no signal or an itable signal is detected.  yScreen ⇔ ORIGINAL ⇔ TURN OFF  ①  creen is the screen you can register a desired screen. ORIGINAL
The unsu	start up screen is the screen displayed when no signal or an itable signal is detected.  yScreen $\Leftrightarrow$ ORIGINAL $\Leftrightarrow$ TURN OFF
unsu M	itable signal is detected. yScreen ⇔ ORIGINAL ⇔ TURN OFF  ⊕ ⊕ ⊕ ⊕  creen is the screen you can register a desired screen. ORIGINAL
M	yScreen ⇔ ORIGINAL ⇔ TURN OFF  û—————————  creen is the screen you can register a desired screen. ORIGINAL
	①
M	creen is the screen you can register a desired screen. ORIGINAL
Marc	
scree	en is the existing standard screen. When the TURN OFF is sted, the BLACK screen is used.
• To	avoid remaining as an afterimage, the MyScreen and the
minu it wi	GINAL screens will change to the BLANK screen after several ites. If also the BLANK screen is the MyScreen or ORIGINAL, ill change to the BLACK screen.
	the MyScreen, please refer to the item MyScreen below. About BLANK screens, please refer to the item BLANK. (\$\square\$35)
and	item functions for capturing the MyScreen of the blank screen the start up screen. Please execute displaying the input including
the p	icture you want to capture.
"N	Phoosing this item displays a dialog titled by you start capturing this picture?  MyScreen". It will ask you if you start pturing the picture from the current screen.
	ease wait for the target picture to be played.
	ess the ENTER button when the picture
	display. The picture will freeze and the
fra To	ame for capturing appears.  stop performing, press the RESET or CC button.
	sing the buttons $\blacktriangleleft/\triangleright/\blacktriangle/\blacktriangledown$ adjust the frame position. Please
m	ove the frame to the position of the picture which you want to use.  To start registration, press the ENTER
	button.
RI	restore the screen and return to the previous dialog, press the ESET or ESC button.
com	stration takes several minutes. When the registration is pleted, the registered screen and the message "MyScreen tration is finished." are displayed for several seconds. If the
regis	tration failed, the message "A capturing error has occurred. se try again." is displayed.

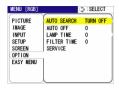
SCREEN menu (continued)

Item	Description				
MyScreen Lock	Using the buttons ▲/▼ turns on/off the MyScreen lock function.				
	TURN ON ⇔ TURN OFF				
	When the TURN ON is selected, the item MyScreen cannot be performed. Use this function for protecting the current				
	MyScreen.				
MESSAGE	Using the buttons $\blacktriangle/\blacktriangledown$ turns on/off the message function.				
	TURN ON ⇔ TURN OFF				
	When the TURN ON is selected, the following message				
	function works.				
	"AUTO IN PROGRESS" while automatically adjusting				
	"NO INPUT IS DETECTED"				
	"SYNC IS OUT OF RANGE"				
	"Searching" while searching for an input signal				
	"Detecting" When an input signal is detected				
	The indication of the input signal by changing				
	The indication of the aspect ration by changing				

### **OPTION** menu

With the OPTION menu, items shown in the table below can be performed.

Choose an item using the cursor buttons ▲/▼ on the projector or remote control, and press the cursor button ▶ on the projector or remote control, or the ENTER button on the remote control to progress, except for the items LAMP TIME and FILTER TIME. Then perform it referring to the following table.



following table.	
Item	Description
AUTO SEARCH	Using the buttons ▲/▼ turns on/off the automatic signal search function.  TURN ON ⇔ TURN OFF
	When the TURN ON is selected, detecting no signal automatically cycles through input ports in order of following. Then when an input is found, the projector will stop searching and display the image.
	If no signal is found, the projector will return to the state before the operation.  RGB   S-VIDEO
AUTO OFF	Using the buttons ▲/▼ adjusts the time to count down to automatically turn the projector off.  Long (max. 99 minutes) ↔ Short (min. 0 minute = DISABLE)  When the time is set to 0, the projector is not turned off automatically.  When the time is set to 1 to 99, and when the passed time with a no-signal or an unsuitable signal reaches at the set time, the projector lamp will go off and the power indicator begins blinking. Please refer to the section "Turning off the power."  (□16)

## OPTION menu (continued)

Item	Description			
LAMP TIME	The lamp time is the time counted after the last resetting. It is shown in the OPTION menu as the use time of the lamp. Performing this item resets the time.  Pressing the RESET button on the remote control or the button  ▶ on the projector for about 3 seconds displays a dialog to make sure. To perform reset, point at RESET using the button			
	RESET ← CANCEL  CAMP_TIME ORSET CANCEL			
	• Please reset the lamp time only when you have replaced the lamp, for correct messages about the lamp.			
	• About the lamp replacement, please see the section "Lamp." (41, 42)			
FILTER TIME	The filter time is the time counted after the last resetting. It is shown in the OPTION menu as the use time of the air filter. Performing this item resets the time.			
	Pressing the RESET button on the remote control or the button  ▶ on the projector for about 3 seconds displays a dialog to make sure. To perform reset, point at RESET using the button			
	RESET & CANCEL  FILTER TIME  O RESET  CANCEL			
	<ul> <li>Please reset the filter time only when you have cleaned or replaced the air filter, for correct messages about the air filter.</li> <li>About the caring the air filter, please see the section "Air filter." (43)</li> </ul>			

## OPTION menu (continued)

Item	Description
SERVICE	Choosing this item displays the SERVICE menu.  Choose an item using the buttons ▲/▼, and press the button ▶  or the ENTER button to progress.  FAN SPEED ⇔ AUTO ADJUST
	FAN SPEED: Using the buttons ▲/▼ switches the rotation speed of the cooling fans. The HIGH is the mode for use at highlands etc. Note that the projector is noisier when the HIGH is selected.  HIGH ⇔ NORMAL  FINISHED  HIGH  NORMAL  AUTO ADJUST: Using the buttons ▲/▼ enables or disables the automatic adjustment.
	ENABLE ⇔ DISABLE  GHOST:  1. Choose a color element of ghost using the buttons ◀/▶.  2. Adjust the chosen element using the buttons ▲/▼ to disappear ghost.
	FACTORY RESET:  To perform reset, point at RESET using the button ▲.  By this function, all the items in all of menu will collectively return to the initial setting. Note that the items LAMP TIME, FILTER TIME and LANGUAGE are not reset.  RESET ⇔ CANCEL

## Maintenance

## Lamp

ÂWARNING ÂHIGH VOLTAGE ÂHIGH TEMPERATURE À HIGH PRESSURE

- ▶ The projector uses a high-pressure mercury glass lamp. The lamp can break with a loud bang, or burn out, if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.
- ► About disposal of a lamp This product contains a mercury lamp; do not put in trash. Dispose of in accord with environmental laws.

For lamp recycling, go to www.lamprecycle.org. (in the US)

For product disposal, contact your local government agency or www.eiae.org (in the US) or www.epsc.ca (in Canada).

For more information, call your dealer.



Disconnect the plug from the power outlet

- If the lamp should break (it will make a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself.
- If the lamp should break (it will make a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
- Before replacing the lamp, turn the projector off and unplug the power cord, then wait at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.
- Never unscrew except the appointed (marked by an arrow) screws.



- Do not open the lamp cover while the projector is suspended from above. This is dangerous, since if the lamp's bulb has broken, the shards will fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken.
- Do not use the projector with the lamp cover removed. At the lamp replacing, make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.
- Use only the lamp of the specified type.
  - If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or a service representative.



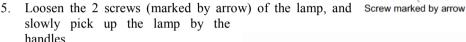
- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- If the indicators or a message prompts you to replace the lamp (see the section "Related Messages" and "Regarding the indicator Lamps"), replace the lamp as soon as possible. Using the lamp for long periods of time, or past the replacement date, could cause it to burst. Do not use old (used) lamps; this is a cause of breakage.

When the indicators or a message prompts you to replace the lamp, replace the lamp as soon as possible.

- Turn the projector off, and unplug the power cord. Allow the lamp to cool for at least 45 minutes.
- 2. To prepare a new lamp, contact your dealer and tell the lamp type number = **RLC-004**. If the projector is mounted on the ceiling, or if the lamp has broken. also ask the dealer to replace the lamp.

#### In the case of replacement by yourself,

- After making sure that the projector has cooled adequately, slowly turn over the projector, so that the bottom is facing up.
- 4. Please loosen the screw (marked by arrow). Then, unhook the claws of the lamp cover and remove the lamp cover.

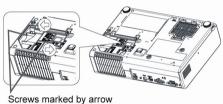


- Insert the new lamp, and retighten firmly two screws that are loosened in the previous process to lock it in place.
- 7. Interlocking the 2 tabs of the lamp cover to the projector, position the lamp cover on the projector, and push
  - the center point of two claws to fix the lamp cover. Then retighten firmly the screw of the lamp cover.
- 8. Slowly turn the projector so that the top is facing up.
- 9. Turn the projector on, and reset the lamp time.  $(\square 39)$ 
  - (1) While the projector running, press the MENU button to open the menu.
  - (2) Choose the "LAMP TIME" on the "OPTION" menu (of Advanced Menu) using  $\triangle/\nabla$  button, then press and hold the RESET button or the  $\triangleright$  button for 3 seconds.
  - (3) Choose the "RESET" using the ▲ button.

#### NOTE-

- When the lamp has been replaced after the message of "THE POWER WILL TURN OFF AFTER 0hr." is displayed, complete the following operation within 10 minutes of switching power on.
- Incorrectly resetting of the lamp timer (resetting without replacement, or neglect of resetting after replacement) will result in incorrect message functions.





Center point of claws



Tabs

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### Air filter

⚠WARNING ► Do not replace the air filter during use or immediately after use. Handling while the projector is in a high temperature could cause a burn and/or malfunction to the projector. Before operating, make sure that the power switch is off, that the power cord is not plugged in, and that the projector is cool adequately.

- ► Use only the air filter of the specified type. Do not use the projector with the air filter and filter cover removed.
- ► Avoid wetting the projector or inserting liquids in the projector. It could result in a fire, an electric shock, and and/or malfunction to the projector.

⚠CAUTION ► Please replace the air filter when it is damaged or too soiled, and also when you replace the lamp.

When the indicators or a message prompts you to clean the air filter, clean the air filter as soon as possible. If the air filter becomes clogged by dust or the like, internal temperatures rise and the power may be automatically turned off for malfunction prevention.

- 1. Disconnect all the connectors and adapters that were connected to the projector's ports. Then slowly turn the projector so that the lens-side is facing up. Please be careful for a projector not to fall. While the projector is placed lens-side up, hold the projector.
- 2. Remove the filter cover and the air filter. Hold the knobs while pulling out it.

Usual filter cover

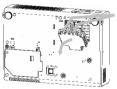


Filter cover's knobs



Air filter's knob

Filter cover for bottom-up use

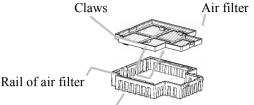


Filter cover's knobs

3. Apply a vacuum cleaner to the vent of the projector for the air filter. And then slowly turn the projector bottom up.

4. Apply a vacuum cleaner to the air filter and filter cover. Then set a new or cleaned air filter into place.

In case of the filter cover for bottom-up use, remove the air filter from the filter cover and clean each. After cleaning, reattach the cleaned filter to the filter cover.



Filter cover for bottom-up use

#### Please replace the air filter when it is damaged or too soiled.

To prepare a new air filter, contact your dealer.

An air filter of specified type will come even with the replacement lamp for this projector.

5. Position the air filter and filter cover into place.

Usual filter cover

Push the points of "PUSH" word with claws to fix the air filter



Interlocking the tabs, snap the filter cover into place.



Filter cover for bottom-up use

Interlocking the tabs, snap the filter cover into place.



- 6. Slowly turn the projector so that the top is facing up, except for the case of bottom-up use.
- 7. Turn the projector on, and reset the filter time using the FILTER TIME function of OPTION menu. (\$\subset\$39\$)

**NOTE** • Incorrectly resetting of the filter timer (resetting without replacement, or neglect of resetting after replacement) will result in incorrect message functions.

### Other care

⚠WARNING ► Do not take care of the projector during use or immediately after use. Handling while the projector is in a high temperature could cause a burn and/or malfunction to the projector. Before operating, make sure that the power switch is off, that the power cord is not plugged in, and that the projector is cool adequately.

- ▶ Never try to care for the inside of the projector personally. Doing is so dangerous.
- ► Avoid wetting the projector or inserting liquids in the projector. It could result in a fire, an electric shock, and and/or malfunction to the projector.
- Don't put a container containing water, cleaner or chemicals near the projector.
- Don't use aerosols or sprays.

⚠CAUTION ► Please take right care of the projector according to the following. Incorrect care could cause not only an injury but adverse influence such as discoloration, peeling paint, etc.

- Do not use cleaner or chemicals other than those listed below.
- Do not polish or wipe with hard objects.

### **Inside of the projector**

In order to ensure the safe use of your projector, please have it cleaned and inspected by your dealer about once every 2 years.

### Caring for the lens

If the lens is flawed, soiled or fogged, it could cause deterioration of display quality. Please take care of the lens, being cautious of the handling.

- 1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
- 2. After making sure that the projector is cool adequately, lightly wipe the lens with a commercially available lens-cleaning wipe. Do not touch the lens directly with your hand.

### Caring for the cabinet and remote control

Incorrect care could have adverse influence such as discoloration, peeling paint, etc.

- 1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.
- 2. After making sure that the projector is cool adequately, lightly wipe with gauze or a soft cloth.
  - If soiling is severe, dip soft cloth in water or a neutral cleaner dilute in water, and wipe lightly after wringing well. Then, wipe lightly with a soft, dry cloth.

## Troubleshooting

### Related messages

When the unit's power is on, messages such as those shown below may be displayed. When any such message is displayed on the screen, please respond as described below. If the same message is displayed after the treatment, or if a message other than the following appears, please contact your dealer or service company.

Although these messages will be automatically disappeared around several minutes, it will be reappeared every time the power is turned on.

Message	Description	
NO INPUT IS DETECTED ON ***	There is no input signal.  Please confirm the signal input connection, and the status of the signal source.	
SYNC IS OUT OF RANGE ON *** fH ***** kHz N ****** Hz	The horizontal or vertical wavelength of the inputted signal is outside of the response parameters of this unit.  Please confirm the specs for this unit or the signal source specs.	

Related messages (continued)

Related messages (continued)			
Message	Description		
CHECK THE AIR FLOW	The internal portion temperature is rising.		
	Please turn the power OFF, and allow the unit to cool		
	down at least 20 minutes. After having confirmed the		
	following items, please turn the power ON again.		
	<ul><li>Is there blockage of the air passage aperture?</li></ul>		
	• Is the air filter dirty?		
	• Does the peripheral temperature exceed 35°C?		
	• If the same indication is displayed after the treatment,		
	please set the HIGH at the FAN SPEED of the item		
	SERVICE of the OPTION menu.		
CLEAN THE AIR FILTER	A note of precaution when cleaning the air filter.		
POWER OFF FIRST,	Please immediately turn the power OFF, and clean or		
THEN CLEAN THE AIR	change the air filter by referring to the "Air Filter"		
FILTER.	section of this manual. After you have cleaned or		
AFTER CLEANING THE	changed the air filter, please be sure to reset the filter		
AIR FILTER,	timer. (439)		
RESET THE FILTER			
TIMER			

NOTE • A lamp has a finite product life. Lamps are characterized by the fact that, after long hours of usage, a lamp will no longer light up, or the lamp will break or burst, etc.

## Regarding the indicator lamps

Lighting and flashing of the POWER indicator, the LAMP indicator, and the TEMP indicator have the meanings as described in the table below. Please respond in accordance with the instructions within the table. If the same indication is displayed after the treatment, or if an indication other than the following is displayed please contact your dealer or service company

	displayed, please contact your dealer or service company.			
POWER	LAMP	TEMP	Description	
indicator	indicator	indicator	•	
Lighting	Turned	Turned	The projector is in a standby state.	
in	off	off	Please refer to the section "Power On/Off". (416)	
Orange				
Blinking	Turned	Turned	The projector is warming up.	
in Green	off	off	Please wait.	
Lighting	Turned	Turned	The projector is in an on state.	
in Green	off	off	Ordinary operations may be performed.	
Blinking	Turned	Turned	The projector is cooling down.	
in	off	off	Please wait.	
Orange	-	_		
Blinking	(discre-	(discre-	The projector is cooling down. A certain error	
in <b>Red</b>	tionary)	tionary)	has been detected.	
III Ittu	tionary)	tronary)	Please wait until the POWER indicator finishes	
			blink, and then perform the proper response	
			measure using the item descriptions below as	
			reference.	
Dlinking	Lighting	Turned	The lamp does not light, and there is a possibility	
Blinking in <b>Red</b>	Lighting	off		
	in <b>Red</b>	011	that interior portion has become heated.	
or			Please turn the power off, and allow the unit to cool	
Lighting			down at least 20 minutes. After the projector has	
in <b>Red</b>			sufficiently cooled down, please make confirmation of	
			the following items, and then turn the power on again.	
			· Is there blockage of the air passage aperture?	
			· Is the air filter dirty?	
			• Does the peripheral temperature exceed 35°C?	
			If the same indication is displayed after the	
			treatment, please change the lamp by referring to	
			the section "Lamp". (41)	
Blinking	Blinking	Turned	The lamp cover has not been properly fixed	
in <b>Red</b>	in <b>Red</b>	off	(attached).	
or			Please turn the power off, and allow the unit to cool	
Lighting			down at least 45 minutes. After the projector has	
in <b>Red</b>			sufficiently cooled down, please make confirmation of	
			the attachment state of the lamp cover. After performing	
			any needed maintenance, turn the power on again. If the	
			same indication is displayed after the treatment, please	
			contact your dealer or service company.	

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Regarding the indicator lamps (continued)

POWER	LAMP	TEMP	·
indicator	indicator	indicator	Description
Blinking in <b>Red</b> or Lighting in <b>Red</b>	Turned off	Blinking in <b>Red</b>	The cooling fan is not operating.  Please turn the power off, and allow the unit to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation that no foreign matter has become
			caught in the fan, etc. and then turn the power on again.  If the same indication is displayed after the treatment, please contact your dealer or service company.
Blinking in Red or Lighting in Red	Turned off	Lighting in <b>Red</b>	There is a possibility that the interior portion has become heated.  Please turn the power off, and allow the unit to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again.  • Is there blockage of the air passage aperture?  • Is the air filter dirty?  • Does the peripheral temperature exceed 35°C?  If the same indication is displayed after the treatment, please set the HIGH at the FAN SPEED of the item SERVICE of the OPTION menu.
Lighting in Green	Alternative blinking in Red		There is a possibility that the interior portion has become overcooled.  Please use the unit within the usage temperature parameters (5°C to 35°C). After the treatment, resent the power to ON.
Lighting in Green	Simultaneous blinking in Red		It is time to clean the air filter, or there is no air filter.  Please immediately turn the power OFF, and clean or change the air filter by referring to the section "Air Filter". After cleaning or changed the lamp, please be sure to reset the filter timer. After the treatment, resent the power to ON.

NOTE • When the interior portion has become overheated, for safety purposes, the power source is automatically turned off, and the indicator lamps may also be turned off. In such a case, press the "O" (OFF) side of the power switch, and wait at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.

# Phenomena that may easily be mistaken for machine defects

⚠WARNING ► Never use the projector if abnormal operations such as smoke, strange odor, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. should occur. In such cases, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact your dealer or service company.

1. Before requesting repair, please check in accordance with the following chart. This operation sometimes resolves your problem.

If the situation cannot be corrected,

2. The projector's microprocessor may need to be reset. Please push the Restart switch by using a cocktail stick or similar and the projector will restart.

Phenomenon	Cases not involving a machine defect	Reference Page
	The electrical power cord is not plugged in.  Correctly connect the power cord.	15
	<b>The power switch is not set to the on position.</b> Set the power switch to [   ] (On).	16
	The main power source has been interrupted	16, 17
	during operation such as by a power outage	
	(blackout), etc.	
	Please turn the power off, and allow the unit to	
Power does not	cool down at least 20 minutes. After the projector	
come on.	has sufficiently cooled down, please turn the	
	power on again.	
	Either there is no lamp and/or lamp cover, or	41, 42
	either of these has not been properly fixed.	
	Please turn the power off, and allow the unit to	
	cool down at least 45 minutes. After the projector	
	has sufficiently cooled down, please make	
	confirmation of the attachment state of the lamp	
	and lamp cover, and then turn the power on	
	again.	

Phenomena that may easily be mistaken for machine defects (continued)

Pilenomena mat	Reference Page	
Phenomenon	Cases not involving a machine defect	
No pictures are displayed.	The lens cover is closed.	4, 16
	Remove the lens cover.	
	The signal cables are not correctly connected.	13, 14
	Correctly connect the connection cables.	
	The brightness is adjusted to an extremely	25, 27
	low level.	
	Adjust the BRIGHT to a higher level using the	
	menu function or the remote control.	12
	The computer cannot detect the projector as	13
	a plug and play monitor.  Make sure that the computer's can detect a plug	
	and play monitor using other plug and play	
	monitor.	
a 1 i	Color settings are not correctly adjusted.	25, 28, 32
Colors have a	Perform picture adjustments by changing the	20, 20, 02
faded-out	COLOR TEMP, COLOR, TINT and/or COLOR	
appearance,	SPACE settings, using the menu functions.	
or Color tone is	COLOR SPACE setting is not suitable.	32
	Change the COLOR SPACE setting to AUTO,	
poor.	RGB, SMPTE240, REC709 or REC601.	
	The brightness and/or contrast are adjusted	25, 27
	to an extremely low level.	
	Adjust the BRIGHT and/or CONTRAST	
	settings to a higher level using the menu	
Pictures appear	function.	26.24
dark.	The WHISPER function is working. Select the NORMAL to the item WHISPER in	26, 34
	the SETUP menu.	
	The lamp is approaching the end of its	41, 42, 44
	product lifetime.	71, 72, 77
	Replace the lamp.	
	Either the focus and/or horizontal phase	19, 30
Pictures appear blurry.	settings are not properly.	,
	Adjust the focus using the focus ring, and/or H	
	PHASE using the menu function.	
	The lens is dirty or misty.	45
	Clean the lens by referring to the section	
	"Caring for the lens".	

NOTE • Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and such do not constitute or imply a machine defect.

## Warranty and after-service

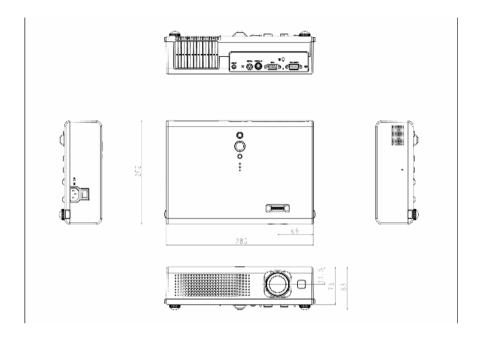
If a problem occurs with the equipment, first refer to the "Troubleshooting" (46) and run through the suggested checks. If this does not resolve the problem, please contact your dealer or the service company. They will tell you what warranty condition is applied.

## **Specifications**

NOTE · This specifications are subject to change without notice.

Item		Specification				
Product name		Liquid crystal projector				
Liquid	Panel size	1.5 cm (0.6 type)				
Crystal	Drive system	TFT active matrix				
panel	Pixels	786,432 pixels (1,024 horizontal x 768 vertical)				
Lens		F=1.77 f=20.7 mm				
Lamp		165W UHB				
Power Supply		AC100-120V/2.7A, AC220-240V/1.5A				
Power Consumption		240W				
Temperature range		5 ~ 35°C (Operating)				
Size		285 (W) x 73 (H) x 202 (D) mm				
		(Not including protruding parts)				
		· Please refer to the following figure.				
Weight (mass)		2.25 kg				
Ports		RGB input RGB D-sub 15pin mini x1				
		Communication port: CONTROL D-sub 9pin x1				
		Video input VIDEORCA x1 S-VIDEOS-video x1				
		Audio input AUDIO Stereo mini x1				
Optional parts	Lamp	RLC-004				
	Air filter and others	Please consult your dealer or ViewSonic for part informati				

## Specifications (continued)



[unit: mm]

## **Customer Support**

For technical support or product service, see the table below or contact your reseller.

Note: You will need the product serial number.

Country/ Region	Web Site	T=Telephone F=Fax	E-mail
United States	www.viewsonic.com/support/	T= (800) 688 6688 F= (909) 468 1202	service.us@viewsonic.com
Canada	www.viewsonic.com/support	T=(866) 463 4775	service.ca@viewsonic.com
United Kingdom	www.viewsoniceurope.com/uk	T= 0207 949 0307	service.eu@viewsoniceurope.com
Europe, Middle East, Baltic countries, and North Africa	www.viewsoniceurope.com	Contact your reseller	service.eu@viewsoniceurope.com
Australia and New Zealand	www.viewsonic.com.au/support	AUS= 1800 880 818 NZ= 0800 008 822	service@au.viewsonic.com
Singapore/Ma laysia/Thailan d	www.viewsonic.com.sg/support/	T= (65) 6273 4018 F= (65) 6273 1566	service@sg.viewsonic.com
South Africa/Other countries	www.viewsonic.com	T= +886 2 2246-3456 F= +886 2 2249-1751	service@sd.viewsonic.com
Hong Kong	www.hk.viewsonic.com/support/	T= +852 3102 2900	service@hk.viewsonic.com
Macau	www.hk.viewsonic.com/support/	T= +853 700 303	service@hk.viewsonic.com
Korea	www.viewsonic.com	T= 080 333 2131	service@kr.viewsonic.com

# Limited Warranty ViewSonic® Projector

#### What the warranty covers:

ViewSonic warrants its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, ViewSonic will at its sole option repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

#### How long the warranty is effective:

North and South America: Three (3) years warranty for all parts excluding the lamp, three (3) years for labor, and one (1) year for the original lamp from the date of the first consumer purchase. Europe except Poland: Three (3) years warranty for all parts excluding the lamp, three (3) years for labor, and ninety (90) days for the original lamp from the date of the first consumer purchase. Poland: Two (2) years warranty for all parts excluding the lamp, two (2) years for labor, and ninety (90) days for the original lamp from the date of the first consumer purchase. Other regions or countries: Please check with your local dealer or local ViewSonic office for the warranty information.

Lamp warranty subject to terms and conditions, verification and approval. Applies to manufacturer's installed lamp only. All accessory lamps purchased separately are warranted for 90 days.

#### Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

#### What the warranty does not cover:

- 1. Any product on which the serial number has been defaced, modified or removed.
- 2. Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - **b.** Repair or attempted repair by anyone not authorized by ViewSonic.
  - c. Any damage of the product due to shipment.
  - d. Removal or installation of the product.
  - e. Causes external to the product, such as electric power fluctuations or failure.
  - f. Use of supplies or parts not meeting ViewSonic's specifications.
  - g. Normal wear and tear.
  - **h.** Any other cause which does not relate to a product defect.
- Any product exhibiting a condition commonly known as "image built-in" which results when a static image is displayed on the product for an extended period of time.
- Removal, installation, and set-up service charges.

#### How to get service:

- For information about receiving service under warranty, contact ViewSonic Customer Support. You will need to
  provide your product's serial number.
- 2. To obtain warranted service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
- Take or ship the product freight prepaid in the original container to an authorized ViewSonic service center or ViewSonic.
- 4. For additional information or the name of the nearest ViewSonic service center, contact ViewSonic.

#### Limitation of implied warranties:

There are no warranties, express or implied, which extend beyond the description contained herein including the implied warranty of merchantability and fitness for a particular purpose.

#### **Exclusion of damages:**

ViewSonic's liability is limited to the cost of repair or replacement of the product. ViewSonic shall not be liable for:

- Damage to other property caused by any defects in the product, damaged based upon inconvenience, loss of use
  of the product, loss of time, loss of profits, loss of business opportunity, loss of goodwill, interference with
  business relationships, or other commercil loss, even if advised of the possibility of such damages.
- 2. Any other damages, whether incidental, consequential or otherwise.
- 3. Any claim against the customer by other party.

#### Effect of state law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

#### Sales outside the U.S.A. and Canada:

For warranty information and service on ViewSonic products sold outside of the U.S.A. and Canada, contact ViewSonic or your local ViewSonic dealer.

Warranty\_Projectors Rev. 1d 1 of 1
4.3: Projector Warranty Release Date: 03-31-05

