

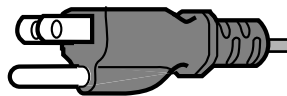
- This product should be operated only with the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
- This product is equipped with a three-wire plug. This plug will fit only into a grounded power outlet. If you are unable to insert the plug into the outlet, contact your electrician to install the proper outlet. Do not defeat the safety purpose of the grounded plug.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at doors, plugs, receptacles, and the point where they exit from the product.
- For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the product due to lightning and power line surges.
- Do not overload wall outlets, extension cords, or convenience receptacles on other equipment as this can result in a risk of fire or electric shock.
- Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltages and other hazards. Refer all service to qualified service personnel.
- Unplug this product from the wall outlet and refer service to qualified service personnel under the following conditions:
 - a) When the power supply cord or plug is damaged.
 - b) If liquid has been spilled, or objects have fallen on the product.
 - c) If the product has been exposed to rain or water.
 - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the Operation Manual, as an improper adjustment of controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - e) If the product has been dropped or damaged in any way.
 - f) When the product exhibits a distinct change in performance—this indicates a need for service.
- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or with same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- The product should be placed more than one foot away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.
- When connecting other products such as VCR's, and personal computers, you should turn off the power of this product for protection against electric shock.
- Do not place combustibles behind the cooling fan. For example, cloth, paper, matches, aerosol cans or gas lighters that present special hazards when overheated.
- Do not look into the projection lens while the illumination lamp is turned on. Exposure of your eyes to the strong light can result in impaired eyesight.
- Do not look into the inside of this unit through vents (ventilation holes), etc. Do not look at the illumination lamp directly by opening the cabinet while the illumination lamp is turned on. The illumination lamp also contains ultraviolet rays and the light is so powerful that your eyesight can be impaired.
- Use only the accessory cord designed for this product to prevent shock.

The power supply voltage rating of this product is AC 100–120V, the power cord attached conforms to the following power supply voltage. Use only the power cord designated by our dealer to ensure Safety and EMC.

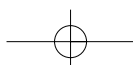
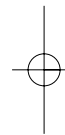
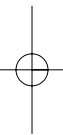
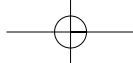
When it is used by other power supply voltage, power cable must be changed.

Consult your product dealer.

Power cord



Power supply voltage: AC 100–120V



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English

PRECAUTIONS FOR SAFE AND PROPER USE

Regarding Symbol Indications

Numerous symbols are employed as indication in the precautions for safety, precautions for handling, and in the indication to the products. These are designed to prevent in advance any possible infliction of injury on you and other individuals and the damage of properties through the proper use of the product. The symbols and meanings are shown below. Grasp the contents of the symbols completely before reading this manual.



WARNING

This represents the contents in which the probabilities for death or serious injury are assumed if this symbol indication is ignored and the product is erroneously handled.



CAUTION

This represents the contents in which the probabilities for injury to be inflicted are assumed and the contents in which material damages to be sustained are assumed if this symbol indication is ignored and the product is erroneously handled.

Examples of Symbol Indications



This symbol informs you of the presence of the contents that demands caution (including danger and warning). Specifically prohibited contents (caution against electric shock in case of the left symbol) are illustrated in the symbol.

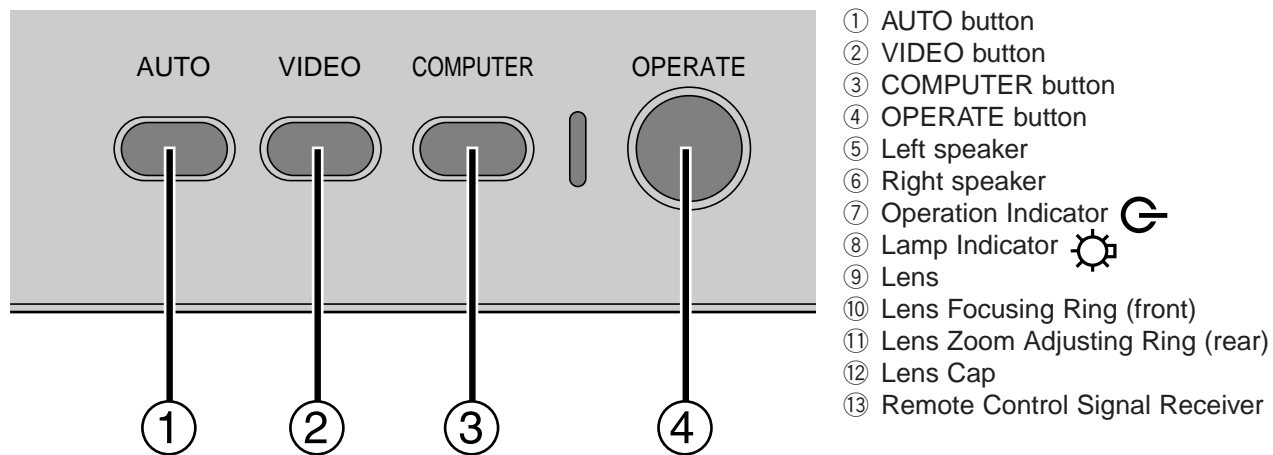




This symbol informs you of prohibited actions. Specifically prohibited contents (prohibition of disassembly in case of the left symbol) are illustrated in the symbol and its vicinity.



This symbol informs you of the contents that forces you to take some action or gives you some guidelines or instructions. Specific contents of instructions (unplug the power cord from the outlet in case of the left symbol) are illustrated.

Names of Component Parts and Sections

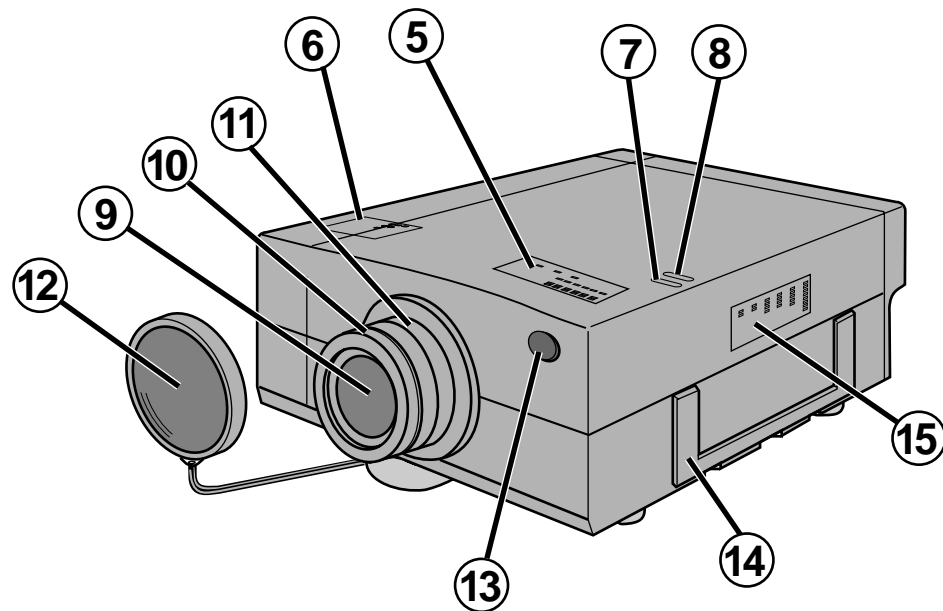


- ⑤ Left speaker
 ⑥ Right speaker
 ⑦ Operation Indicator 
 ⑧ Lamp Indicator 
 ⑨ Lens
 ⑩ Lens Focusing Ring (front)
 ⑪ Lens Zoom Adjusting Ring (rear)
 ⑫ Lens Cap
 ⑬ Remote Control Signal Receiver

WARNING

Do not look into the projection lens while an illumination lamp is turned on.
 Exposure of your eyes to the strong light can result in impaired eyesight.

English



- ⑭ Handle
 Lift it to carry the unit.

CAUTION



To carry the unit, hold this handle. Do not hold the lens section to lift the unit. Otherwise, the damage of the unit and injury can result.

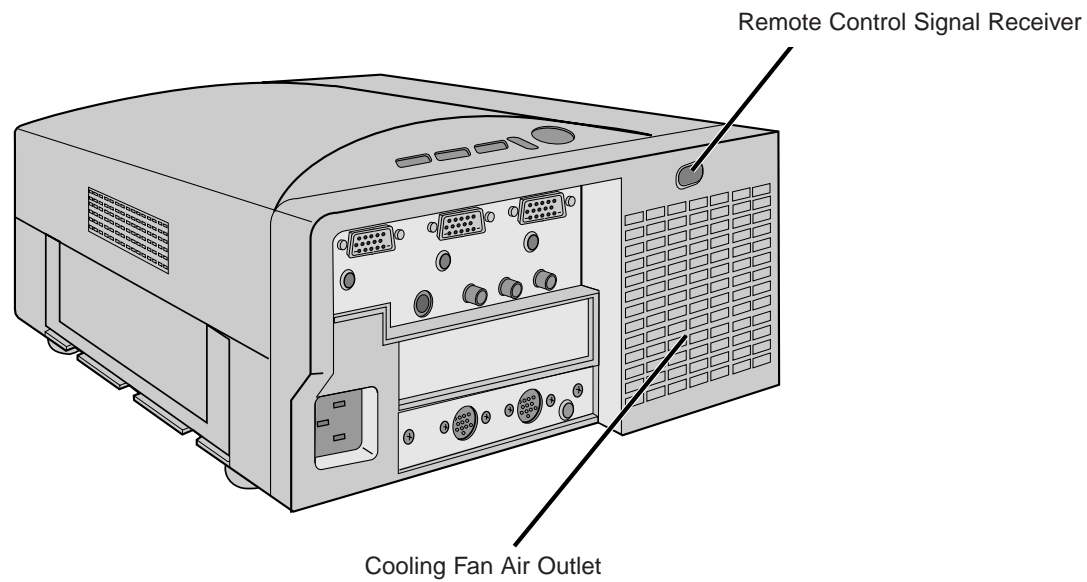
- ⑮ Vents

CAUTION



Do not insert foreign objects such as metals and inflammables into the vents. Do not block them with any obstacles. Otherwise, fire and electric shock can result.

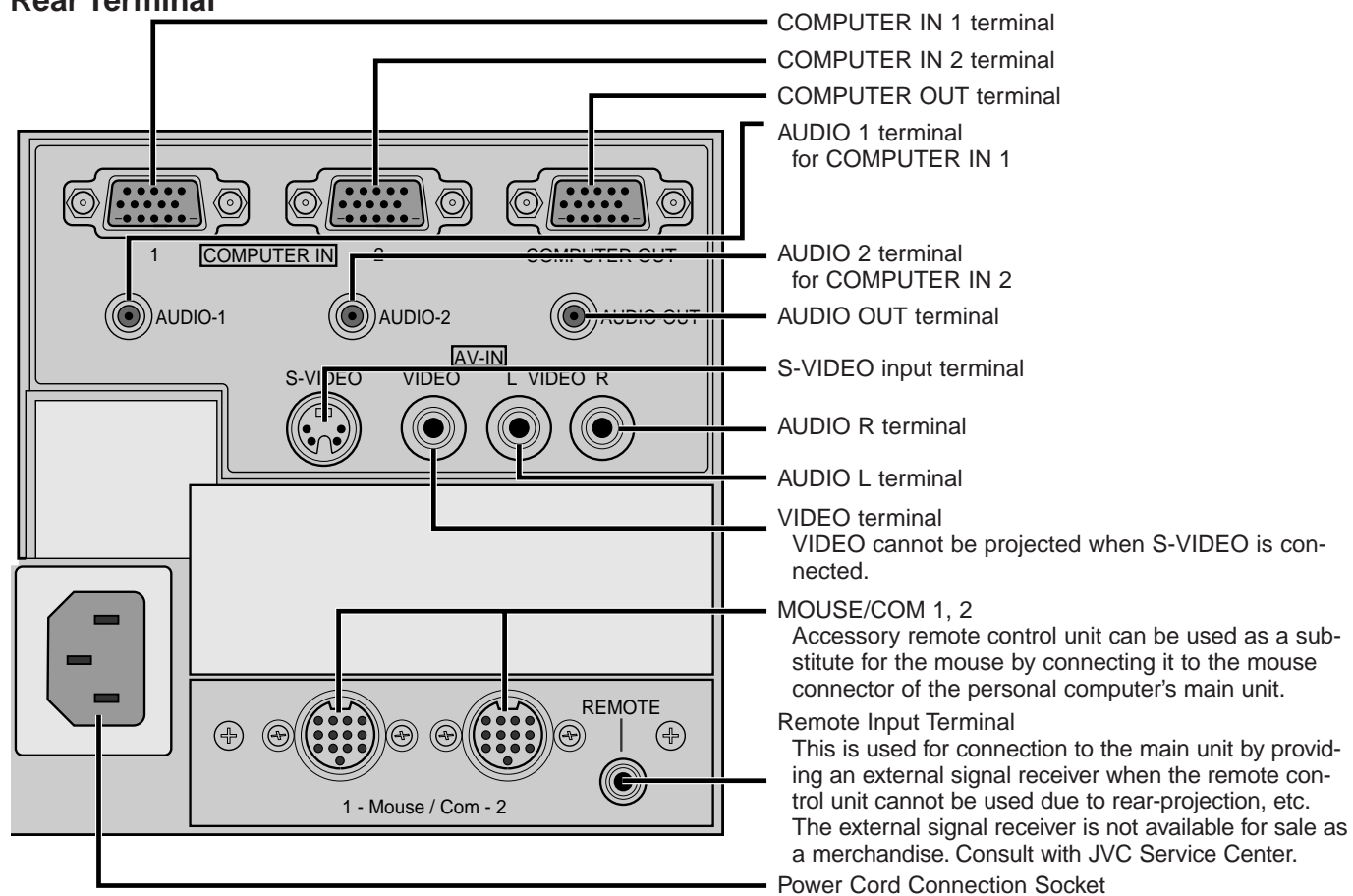
Names of Component Parts and Sections



CAUTION

Hot air is blown out. Be careful as it can cause a low-temperature burn. Besides, do not insert into the vents any foreign objects such as metals and inflammables. Do not block the vents with obstacles. Otherwise, fire and electric shock can result.

Rear Terminal

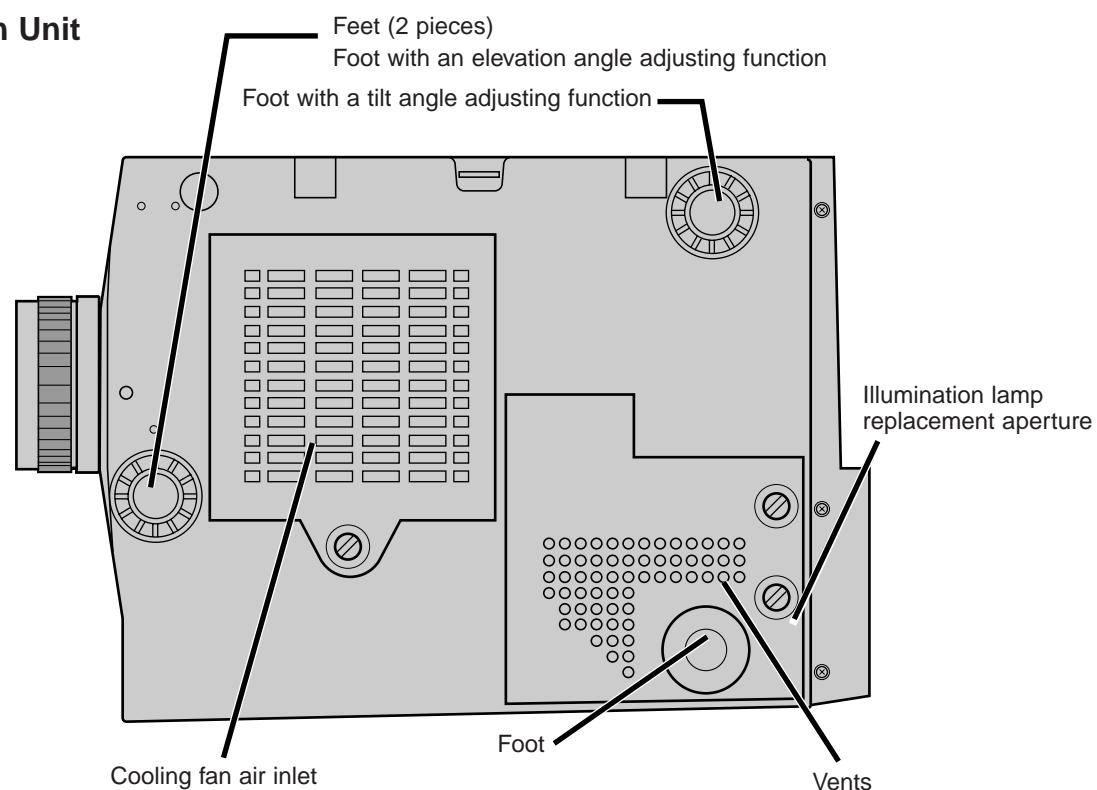


CAUTION

Use the accessory power cord. Furthermore, do not use any damaged cord. Power cord itself generates heat, resulting in fire and electric shock.

Names of Component Parts and Sections

Bottom of Main Unit





English

CAUTION

These vents suck in the air to cool this unit. If the vents are blocked with obstacles, heat generated inside can result in fire. Do not insert metals and inflammables into the vents and do not block the vents with obstacles. Moreover, the paper, cloth, soft cushion, etc., can be sucked in if they are placed near the vents. Therefore, be careful because such actions can result in mechanical failure, fire, and electric shock.

CAUTION

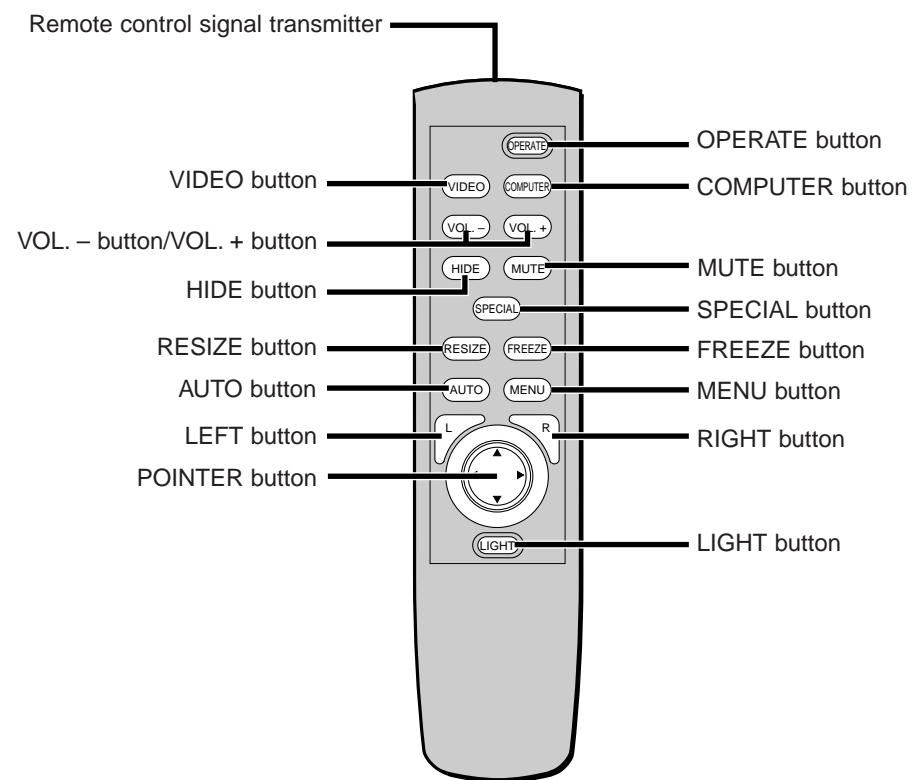
  Do not insert metals and inflammables into the vents and do not block the vents with obstacles. Otherwise, fire and electric shock can result.

[Accessories]

Power cord (2.5 m).....	1 piece	Mouse serial cable for MAC (1.9m)	1
Remote control unit.....	1	Mouse serial cable for DOS/V (1.9m)	1
Lens cap.....	1	PC audio cable (2m)	1
Personal computer connecting cable		AV cable (3m).....	1
(2 m/D-Sub 15 Pin)	1 piece	AA/R6/UM-3 batteries	2
Conversion adapter for MAC 13"	1	Instruction manual (this manual).....	1
Conversion adapter for MAC 16"	1		
Conversion adapter for MAC 19"	1		

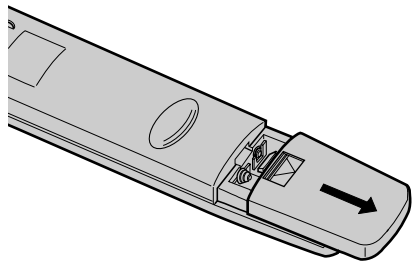
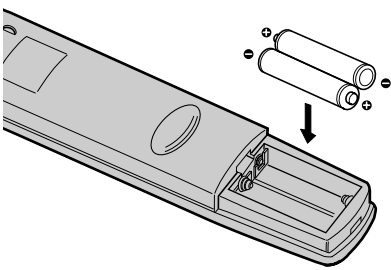
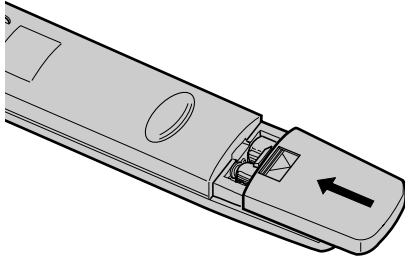
Names of Component Parts and Sections

Remote Control Unit



How To Load batteries

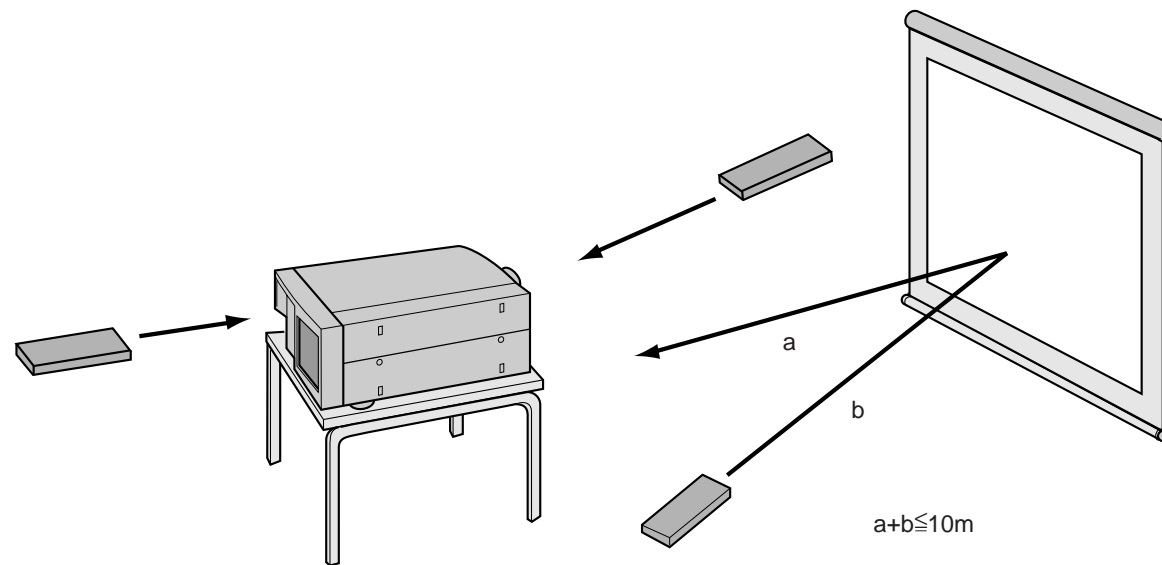
Load the batteries into the remote control unit before starting operation.
(Batteries are packed along with accessory cables.)

① Open Back Lid	② Load batteries	③ Close Back Lid
 <p>Open the back lid by sliding it in the arrow-indicated direction.</p>	 <p>Load accessory batteries (AA/R6/UM-3 × 2) as indicated by + and - labels.</p>	 <p>Close the back lid by sliding it in the arrow-indicated direction till it goes click.</p>

Names of Component Parts and Sections

Reaching Range of Remote Control Unit

To use the remote control unit, train it on the remote control signal receiver provided on the body of the unit. Straight reaching range is within 33 ft/10 m. Note, however, that when using a remote control unit that is reflected on a screen, the straight reaching range may become shorter for some types of screen.



English

WARNING

When a battery used in this unit is removed, use caution so that a little child does not swallow it by mistake. Keep the batteries away from little children. If a child should swallow it, consult your medical doctor immediately.

CAUTION

Your attention is invited to the following points because erroneous use of the batteries can result in liquid leak or rupture.

- Load the batteries properly as indicated by the + and – labels.
- Remove the batteries when the unit is not used for a long time.
- Do not mix up different types of batteries for use because their properties differ.
- Do not mix new batteries and used batteries for use because the service life of new batteries can be shortened and there is a fear of liquid leak from the used batteries.
- Remove the batteries as soon as they are out of service. Keeping them inside the unit can lead to liquid leak that results in the mechanical failure. If you touch the leaked liquid, your skin may be injured, and therefore be sure to wipe the liquid out immediately. Be careful.
- Depending on the storage condition, the accessory batteries can become weak in a short time. Replace them with new batteries a little earlier than usual.
- Do not throw the batteries into fire, and do not charge the batteries.

Connecting

CAUTION

When you connect the television, video, computer, game machine, etc., to this unit, carefully read the instruction manuals of respective components before starting with connection. Do not forget to turn off the power of the unit before connection, and observe given instructions.

When the power cord is connected, this unit becomes powered and enters into sleep mode. Eyes can be exposed by mistake to the light of high brightness resulting in impaired eyesight when a lamp is lit by inadvertently pressing a button during connection with other components. The connection of the power cord is recommended to be performed after completing the connection with other components and the installation of this unit explained below.

The display sizes of the components to be connected are shown in the following table. If the display size is smaller than 800 x 600, the periphery of a picture becomes black. Caution must be exercised as this phenomenon adversely affects adjacent pictures when the pictures are used in a line coming close with one another vertically and horizontally by using a plural number of LCD projectors. In case of a resizing display, there is a case where the picture quality becomes more deteriorated than that of the window display due to electrical correction. Also, video signals are different in picture quality from the picture that becomes a source because the video signals undergo an electrically simplified digitization.

Connection of the unit to the S-VIDEO terminal disables the projection of a picture entered from the VIDEO IN terminal.

Compatible Resolutions

	Format	No. of pixels	Horizontal frequency (KHz)	Vertical frequency (Hz)
PC/AT DOS/V	VGA 60	640 × 480	31.469	59.9416
	VESA 72	640 × 480	37.864	72.809
	VESA 85	640 × 480	43.269	85.008
	VGAEGA	640 × 350	31.46	70.000
	SVGA56	800 × 600	35.156	56.256
	SVGA 60	800 × 600	37.879	60.317
	SVGA 72	800 × 600	48.077	72.188
	SVGA 75	800 × 600	46.875	75.000
	SVGA 85	800 × 600	53.674	85.061
	XGA 60	1024 × 768	48.363	60.004
	XGA 70	1024 × 768	56.476	70.069
	XGA 75	1024 × 768	60.023	75.029
	XGA 85	1024 × 768	68.678	84.997
MAC	MAC 13"	640 × 480	35.000	66.667
	MAC 16"	832 × 624	49.107	75.087
	MAC 19"	1024 × 768	60.241	74.927
	MAC 19"	1024 × 768	48.193	59.278
VIDEO	NTSC	640 × 480	15.374	60.000
	PAL	768 × 576	15.625	50.000
	SECAM	768 × 576	15.625	50.000

Display Format

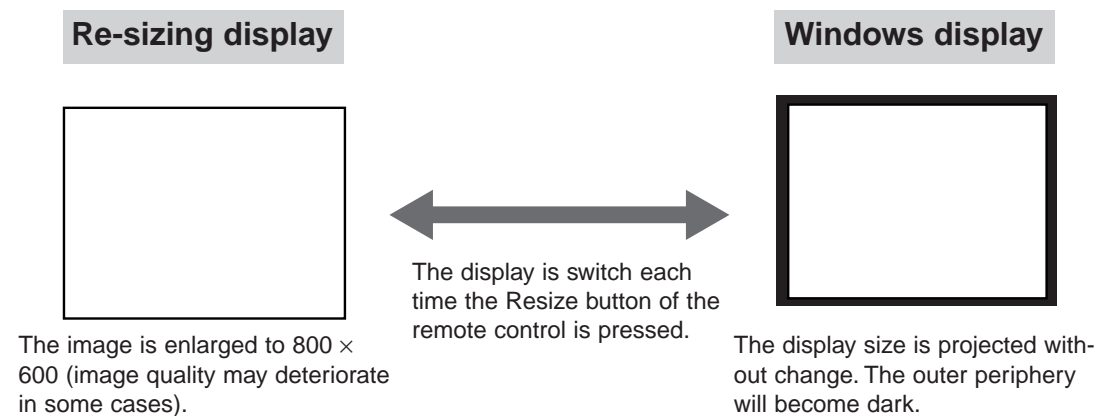
Format	No. of pixels	Resizing display	Window display
PC 98	640 × 400	800 × 500	640 × 400
VGA 60	640 × 480	800 × 600	640 × 480
VGAEGA	640 × 350	800 × 438	640 × 350
VESA 72/75/85	640 × 480	800 × 600	640 × 480
SVGA 56/60/72/75/85	800 × 600	800 × 600	800 × 600
XGA 60/70/75	1024 × 768	800 × 600	800 × 600
MAC 13"	640 × 480	800 × 600	640 × 480
MAC 16"	832 × 624	800 × 600	800 × 600
MAC 19"	1024 × 768	800 × 600	800 × 600
TV (NTSC)	640 × 480	800 × 600	615 × 460
TV (PAL, SECAM)	768 × 576	800 × 600	720 × 540

Connecting

Resizing Display

● Computer screen

When the input display size is smaller than 800×600 .

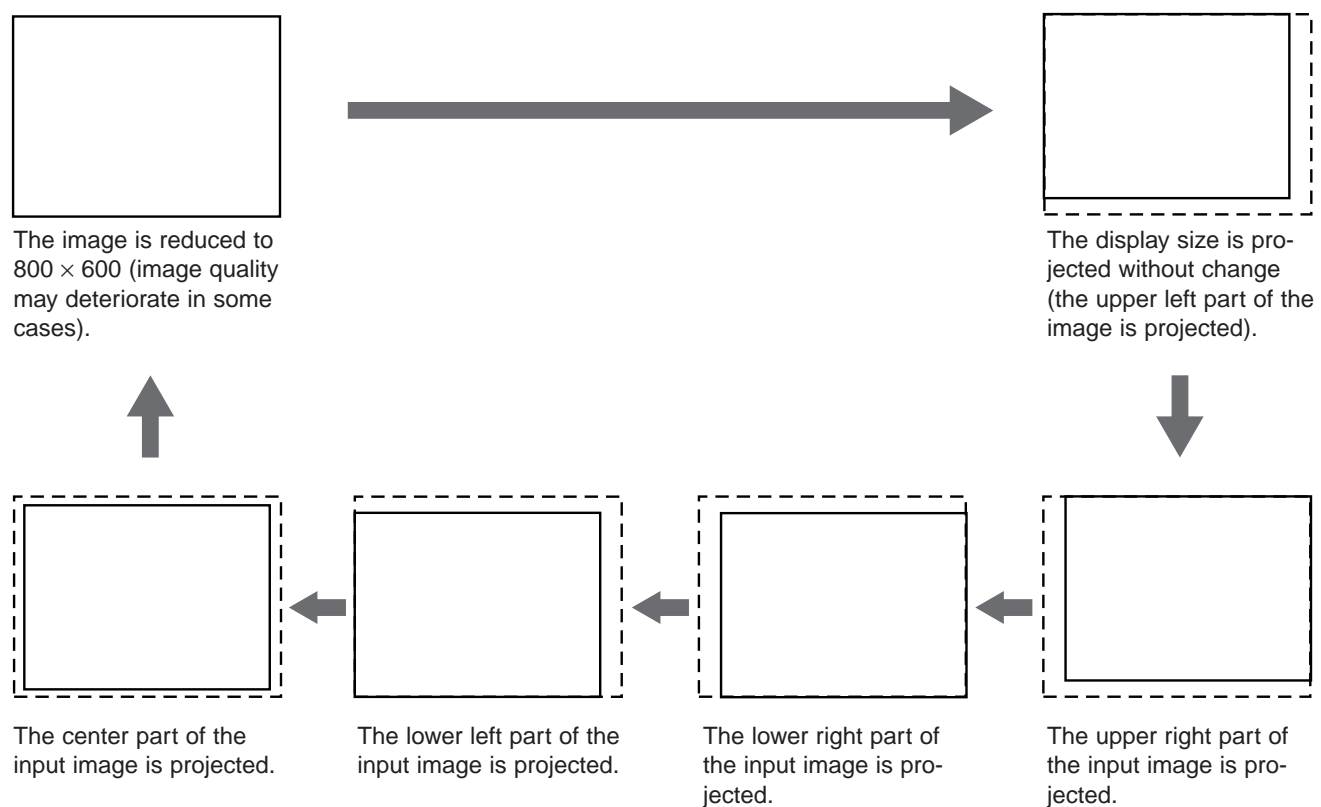


English

When the input display size is the same as 800×600 .

The screen display cannot be switched by pressing the Resize button of the remote control.

When the input display size is larger than 800×600 .



Connecting

● Video Images

When the input signal is NTSC

Resizing display



The outer periphery of the image will become dark.



The display will switch each time the Resize button of the remote control is pressed.

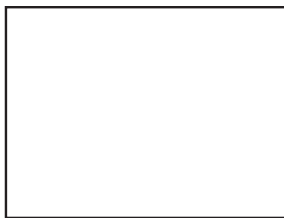
Windows display



The outer periphery of the image will become dark.

When the input signal is PAL or SECAM

Resizing display

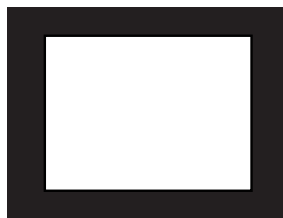


The outer periphery of the image will become dark.



The display will switch each time the Resize button of the remote control is pressed.

Windows display



The outer periphery of the image will become dark.

Connecting

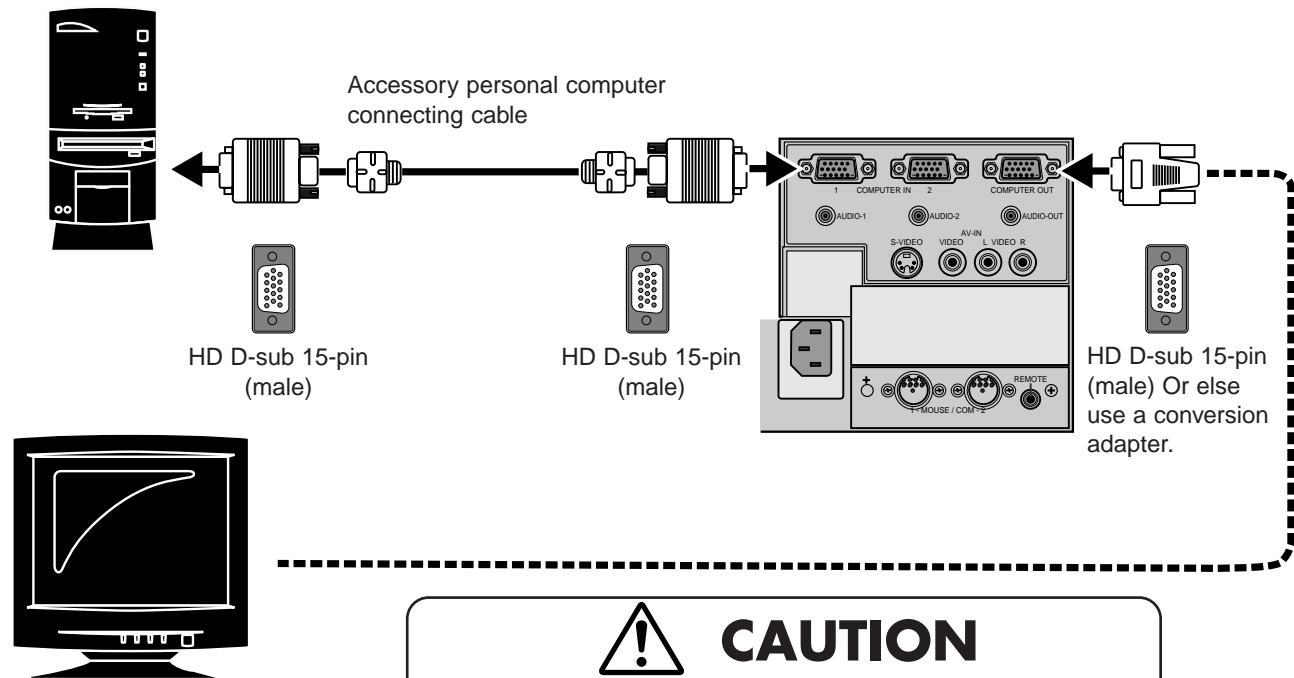
Connecting to a personal computer

Always turn off the projector and personal computer power before connecting.

● Video signal

IBM PC or compatible (DOS/V)

Use the accessory personal computer connecting cable provided.

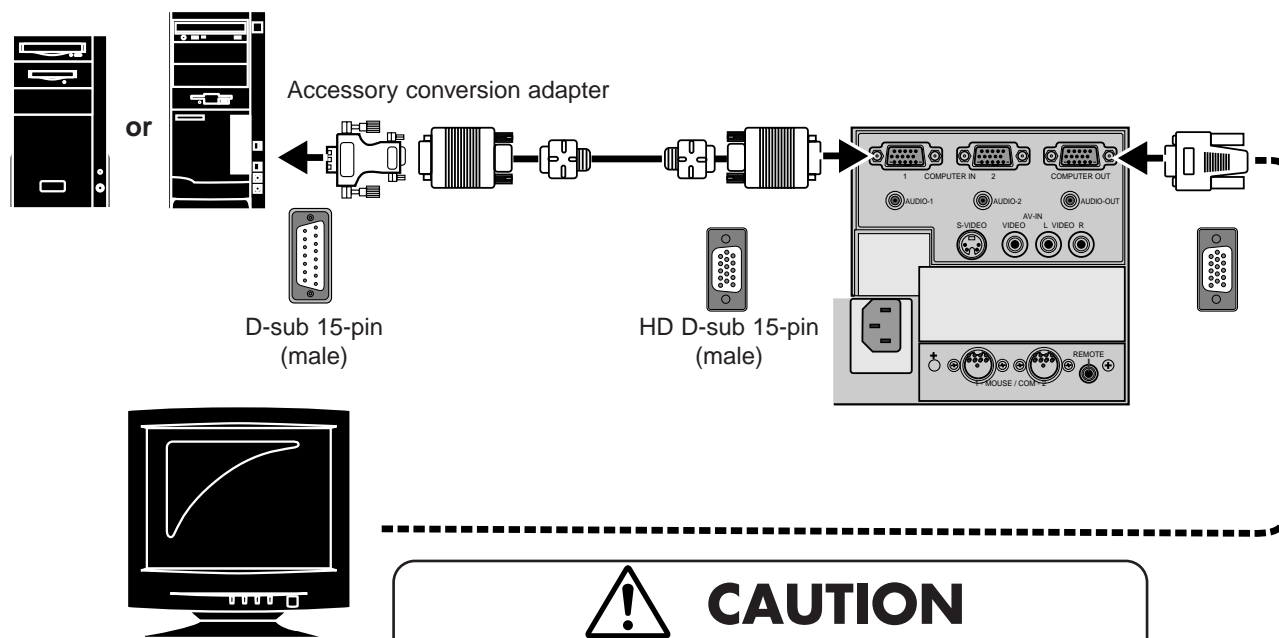


CAUTION

When connecting to a computer display monitor, use the connecting cable equipped with ferrite cores to reduce and remove the high-frequency radiation.

Macintosh

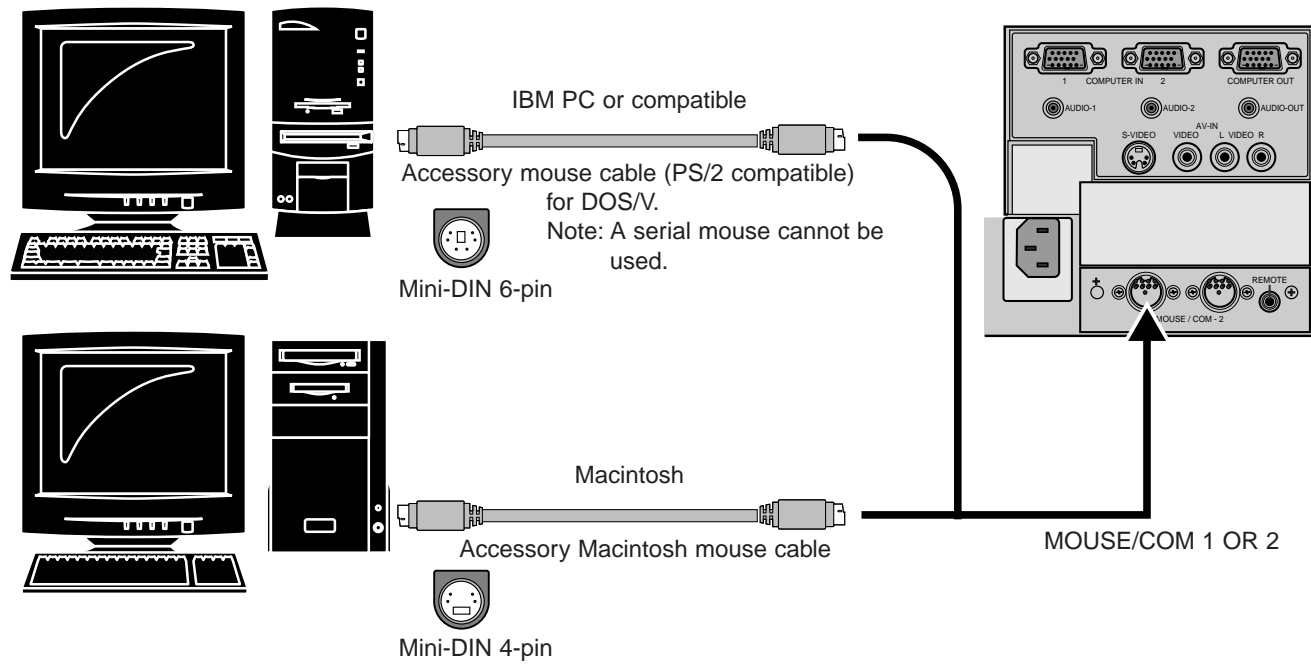
Use the accessory MA13, MA16 or MA19 conversion adapter, whichever is applicable, and the accessory personal computer connecting cable.



Connecting

● Connecting as a mouse

Connect here when using the projector remote control as a mouse.



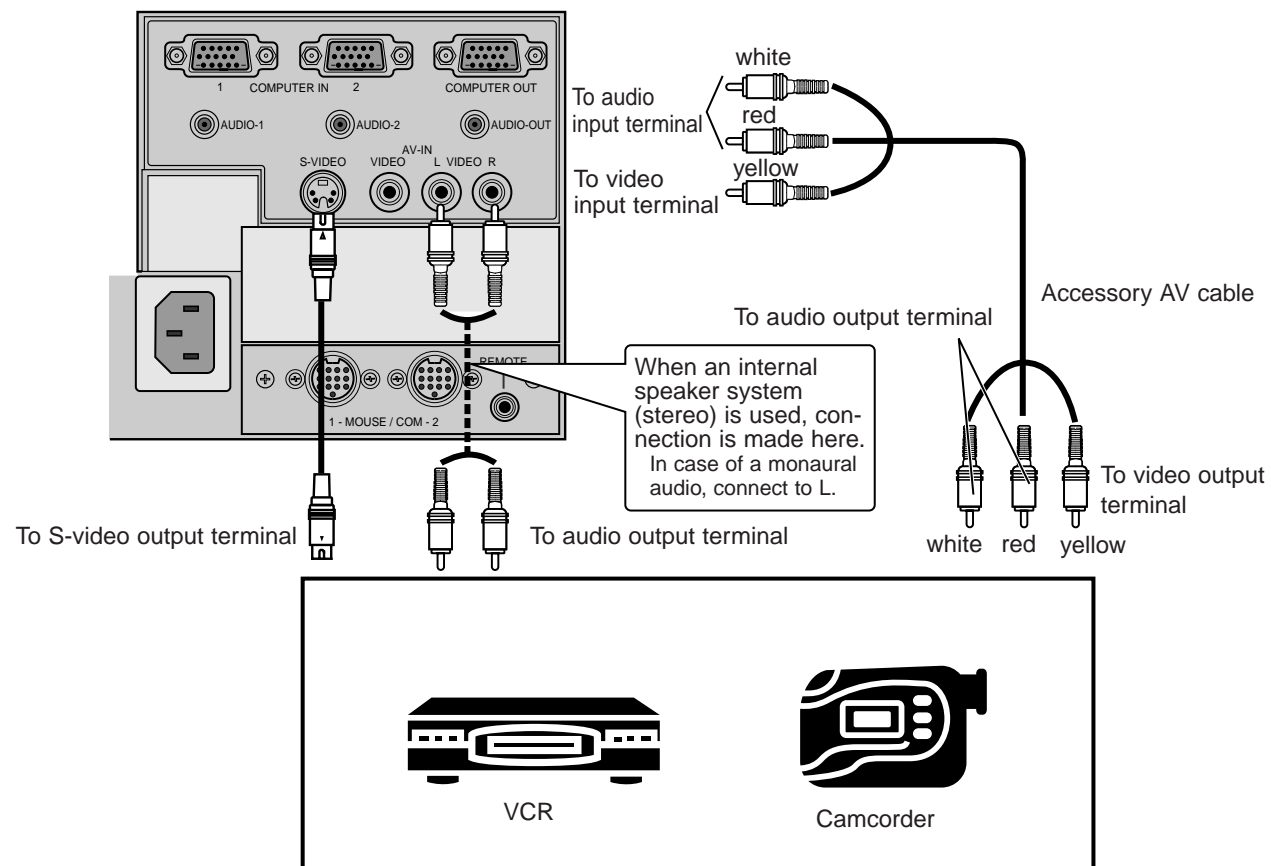
When using a connector other than the accessory mouse cable, use a commercially available adapter, etc.

Connecting

Connection to AV Unit

Make absolutely sure that the power cord of the projector and the AV unit are unplugged before connection.

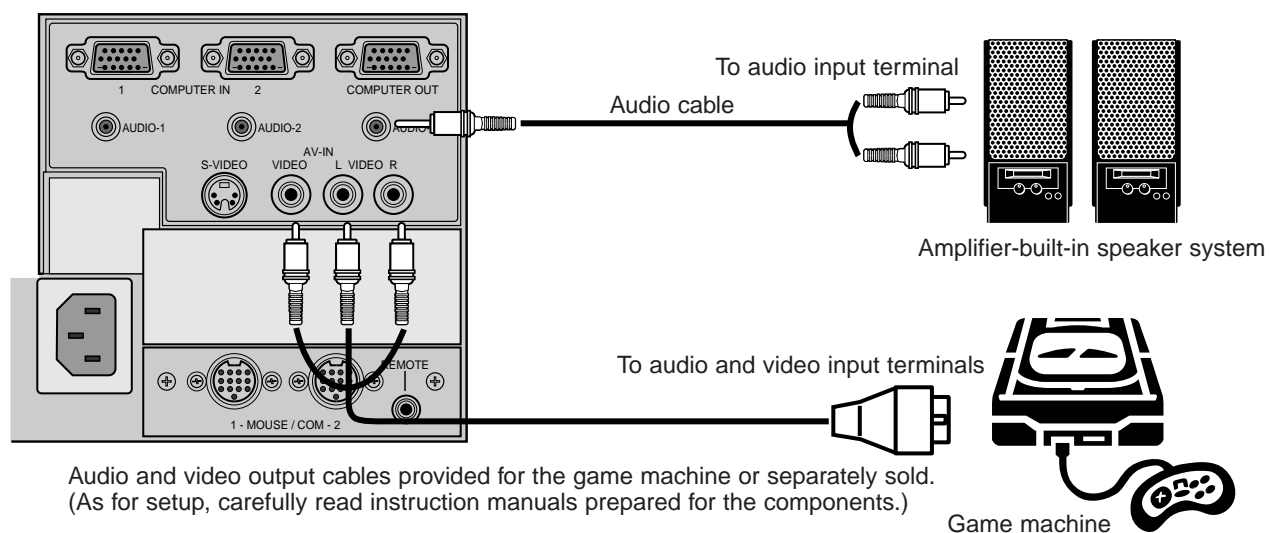
Use the accessory AV cable. Cable for the AV unit with an S-VIDEO terminal is not provided as an accessory. When you extend the AV connecting cable, there is a case where the picture quality of the image becomes deteriorated. What is more, if a connector is connected to the S-VIDEO terminal, video signals entered into the VIDEO terminal cannot be projected.



English

Connecting Other Components

It is feasible to connect amplifier-built-in speaker systems and game machines. Cords to connect such components are not provided as accessories except the AV cable.



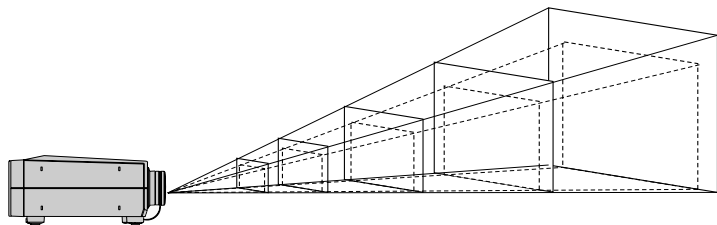
Installation

CAUTION

- ⊘ When the power cord is connected, this unit becomes powered and enters into sleep mode. Eyes can be exposed by mistake to the light of high brightness resulting in impaired eyesight when a lamp is lit by inadvertently pressing a button during installation work of this unit, etc. Connection of the power cord is recommended to be performed after completing the installation of this unit and the connection of other components mentioned above.

Projection Distance and Screen Size

- The projection lens of this unit is a 1.3X manual zoom. At maximum, it is possible to project a screen size 1.3 times as large as the screen size at minimum.
- The projection distance focus ranges between 3.2 ft. / 1 m and 32.1 ft. / 9.8 m. Install the projector within this range.
- If the four sides of the screen are distorted when projecting at the minimum projection distance, we recommend you to install the projector slightly backward.
- If the projector is used by hanging it from the ceiling, use the metal fittings particularly designed for the purpose. Furthermore, it is necessary to bring the projector down from the ceiling for maintenance such as lamp replacement, etc., to avoid any danger. We recommend you, therefore, to choose a suitable place under the ceiling to hang the unit, from where you can easily bring it down.
- Polarized screens cannot be used.



Examples of Size

30" Aspect ratio 4:3
 Diagonal length 76 cm
 (Length 18" / 46 cm × Width 24" / 61 cm)

60" Aspect ratio 4:3
 Diagonal length 152 cm
 (Length 36" / 91 cm × Width 48" / 122 cm)

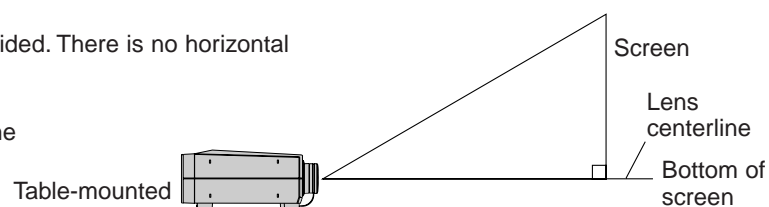
Aspect ratio is 4:3.

Maximum size	30	39	60	79	80	90	100	103	131	140	150	183	200	300
Minimum size	23	30	45	60	63	70	77	80	100	108	115	140	155	229
Projection distance (m)	1.0	1.3	2.0	2.6	6.7	3.0	3.3	3.4	4.3	4.6	4.9	6.0	6.6	9.8

About swing

A certain amount of vertical upward swing is provided. There is no horizontal (left/right) swing.

- The amount of swing is fixed.
- The bottom of the screen should be level with the extended centerline of the lens (TELE - WIDE).



CAUTION



To avoid fire hazards and mechanical failures, do not place this unit in a place exposed to:

- Water, moisture, and dust
- Vibration and abrupt impact
- Direct sunlight
- High and low temperatures: Allowable working temperature and humidity: from 42°F/5°C to 104°F/40°C (20%~80%)
 Allowable storage temperature and humidity: from 6°F/-10°C to 140°F/60°C (10%~90%)
- Oily smoke and cigarette smoke
- Surface of soft articles such as rugs and beddings

CAUTION

When the sunlight or an illumination lamp directly lights the screen, the picture looks whitish making it difficult to see. Under the circumstances, provide a curtain, etc., to shield it.


Trapezoidal distortion caused by tilting the front of the projector upward cannot be corrected; therefore, we recommend that the projector be positioned as perpendicular as possible in relation to the screen.

Installation

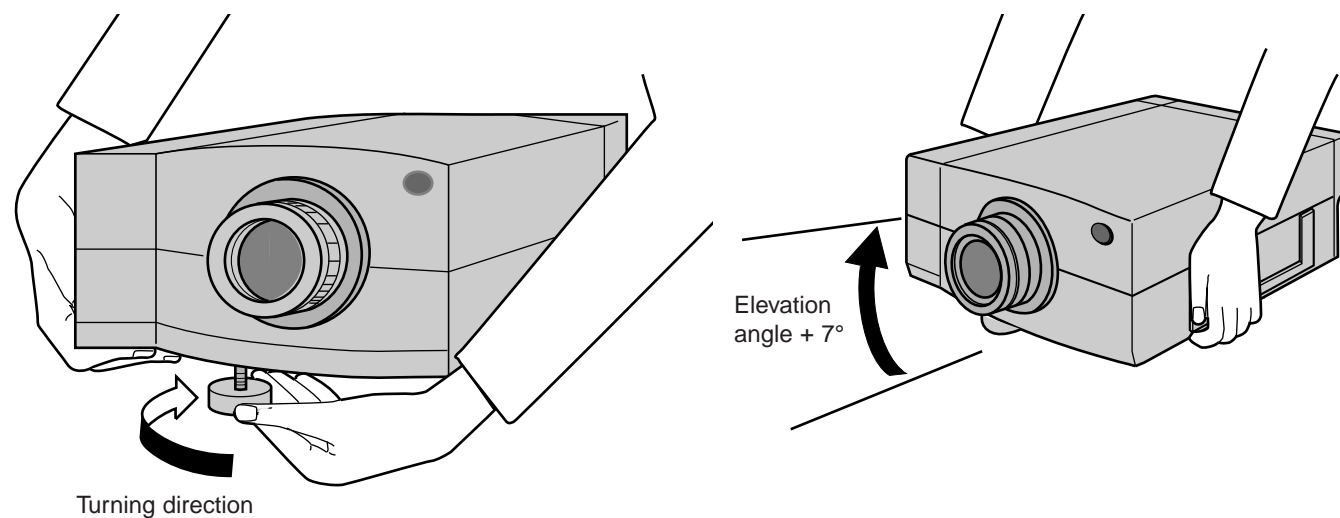
Adjustment on the height and tilt of the screen

The elevation angle and tilt angle are adjusted with the feet. Objective for this action is to adjust the height and tilt of the projection screen. Trapezoidal distortion cannot be corrected. We recommend you to enjoy the picture by making as much perpendicular projection as possible against the screen.

CAUTION

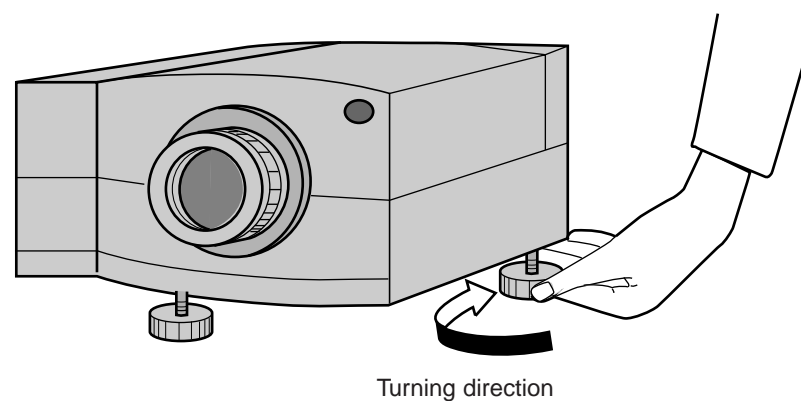
-  When the feet to adjust lift and tilt angles approach the limits of adjustment, it becomes hard to turn them. Do not turn the feet forcibly. Mechanical failures must be avoided.

To adjust the height, turn the foot having an elevation angle adjusting function. It can be elevated up to +7°.



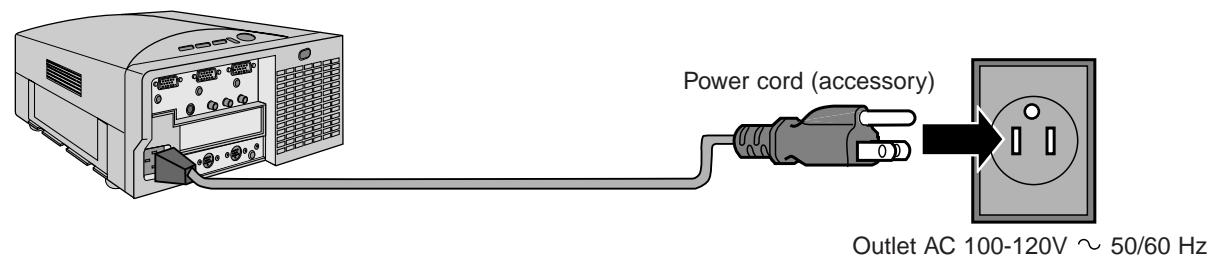
English

To adjust the tilt of the picture, turn the foot with a tilt angle adjusting function.



Connection of Power Cord

Plug in the projector power cord after the connection of components is completed. Connection of the power cord powers the unit instantly with an operation indicator lighting up in orange. Connection of the power cord is recommended after the completion of connection and installation of components to this unit.



- ① Insert the concave side of the power cord into the power cord connecting socket of the main unit.
- ② Insert the plug of the power cord into the outlet.
Use the power conversion plug matching the outlet shape.

⚠ WARNING

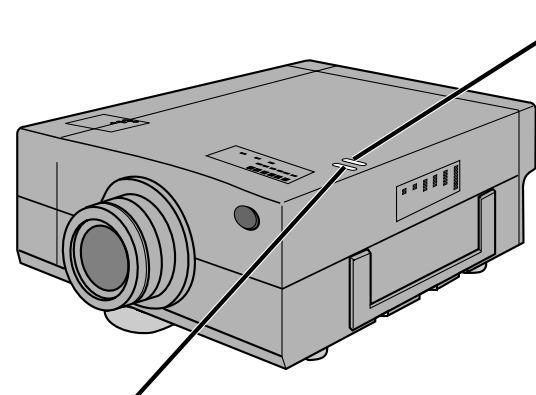
⊘ Observe the following. Otherwise, fire, electric shock, and injury can result.

- The unit enters into a powered state when the power cord is connected. When components are not used, unplug the power cords of the components from the outlets.
- Do not make connection with a cable other than the accessory cable.
- Do not apply a power supply voltage other than the specified voltage.
- Do not damage, break, and modify the power cable. The power cable can also be broken if you put a heavy object on it, or heat it, or tug at it.
- Do not engage in plugging and unplugging with wet hands.

⚠ CAUTION

If the indicators make following indications, take necessary measures on each of them. Leaving them unheeded can result in mechanical failure and fire.

Warning Indication by Indicators



Lamp Indicator Alternate Blinking of Orange and Red

Service life of a lamp is nearing the end. You must either make preparations for a new lamp or replace it with a new lamp. This indicator blinks for 5 minutes every time the power is turned on. Furthermore, this indication takes place when the lamp nears the end of its service life during projection. This warning is displayed on-screen as [LAMP REPLACE] for about 30 seconds.

Light-up of Red

Expiration of the lamp's service life has come. At the same time, you cannot turn on the power. Replace it with a new lamp.

Blinking of Red

Lamp or the power supply for the lamp is abnormal. Check out the installed lamp again. Unplug the power cord from the outlet if the symptom persists, and contact the store where you bought the unit or contact the nearest JVC Service Center.

Operation Indicator Blinking of Orange or Light-up of Red

The inside of the unit reached abnormally high temperature. It is probable that the air filter of the cooling fan is soiled or the air outlet of the cooling fan is blocked. Clean up the air filter or remove the obstacle that blocks the air outlet. Note also that the working temperature range of this unit is between 42°F/5°C and 104°F/40°C. Check the ambient temperature and make adjustment so that the ambient temperature comes within this temperature range. Unplug the power cord from the outlet immediately if the symptom persists, and contact the store where you bought the unit or the nearest JVC Service Center.

Blinking of Red

Unplug the power cord from the outlet immediately and contact the store where you bought the unit or the nearest JVC Service Center.

Light-ON and Light-OFF of Illumination Lamp

Be sure to remove the lens cap before lighting the illumination lamp.

CAUTION

Do not unplug the power cord from the outlet all of a sudden during the use of the projector with the lamp turned on. Such action can result in mechanical failure and shorter service life of the lamp. Do not unplug the power cord from the outlet abruptly even during warming-up for light-on and during cooling after light-off. Doing so can result in mechanical failure or accelerate the deterioration speed of the lamp, resulting in abnormality before reaching the end of its service life.

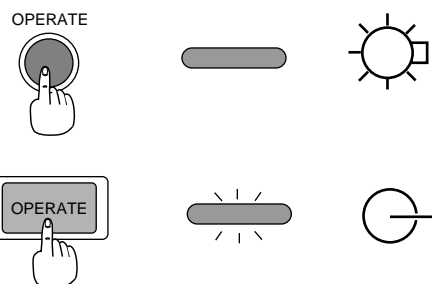
CAUTION


Do not look into the projection lens while the lamp is turned on and do not look into the inside of this unit through vents, etc. Do not open the cabinet and look directly at the light from the illumination lamp. Strong light containing ultraviolet rays can result in impaired eyesight.


To Turn On The Lamp

① Press OPERATE button

Press the OPERATE button on the main unit or the OPERATE button on the remote control unit. Operation indicator lights up in green. Lamp indicator blinks in green. It takes about 2 minutes until the lamp is completely lit.

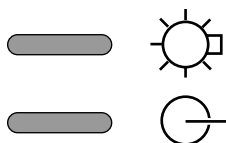


 Do not unplug the power cord from the outlet.

 It is not advisable to press the OPERATE button during warming-up. It shortens the service life of the lamp.

② The Lamp Lights

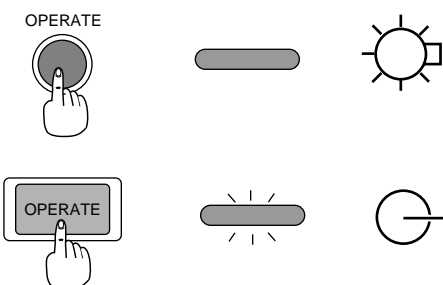
Operation and lamp indicators both light up in green. Lamp remains lit.





To Turn Off Lamp

① Press OPERATE button

Press the OPERATE button on the main unit or the OPERATE button on the remote control unit. Operation indicator lights up in orange. Lamp indicator blinks in orange. It takes some time until the lamp is turned off and the cooling of the lamp is completed. This lamp-off time depends on use conditions.

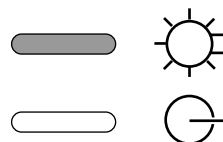


 Do not unplug the power cord from the outlet.

 It is not advisable to press the OPERATE button during the lamp-off time. There is a possibility for fear to shorten the service life of the lamp.

② Lamp Goes Off

Operation indicator lights up in orange. Lamp indicator remains off.

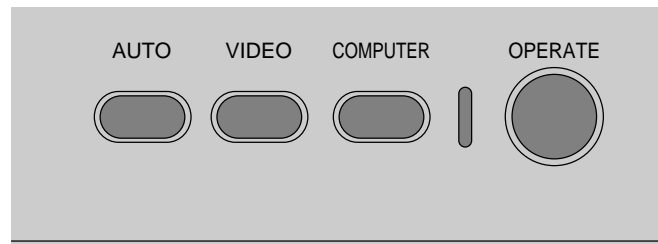


Meaning of Indicators

Operation 	Lamp 	Meaning
Orange lights up	Off	Sleep mode state
Green blinking	Green lights up	Lamp in warming-up state
Green lights up	Green lights up	Lamp in lit state
Orange lights up	Orange blinking	Lamp in cooling state

Main Unit and Remote Control Unit

Buttons Provided On Main Unit



OPERATE

This turns on and off the lamp.

VIDEO

This switches the picture to VIDEO input.

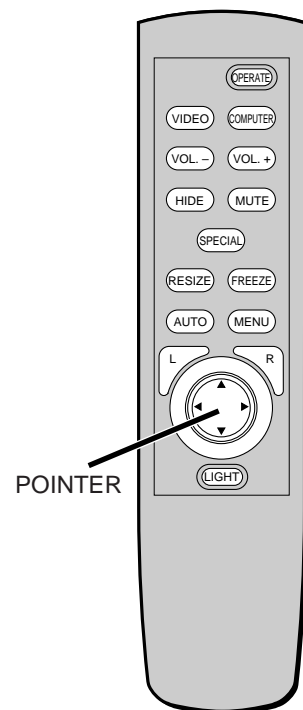
COMPUTER

This switches the picture to COMPUTER. Furthermore, this switches between COMPUTER1 and 2.

AUTO

This makes automatic screen adjustment during the COMPUTER input. The contents of adjustment are the phase, tracking, horizontal position, and vertical position. These can be individually adjusted through the on-screen menu. Sometimes, phase tracking cannot make perfect adjustment. Adjust it to your desired position through the screen menu. In addition, if [BRIGHTNESS] is increased, sometimes this [AUTO] does not function accurately. Return the [BRIGHTNESS] to its initial value by resetting through the on-screen menu and then start with [AUTO].

Buttons Provided On Remote Control Unit



OPERATE

This turns the lamp on and off.

VIDEO

This switches the picture to the VIDEO input.

COMPUTER

This switches the picture to COMPUTER. This also switches between COMPUTER1 and 2.

AUTO

This makes automatic screen adjustment during the COMPUTER input. Contents of adjustment are the synchronization, tracking, horizontal position, and vertical position. These can be individually adjusted through the on-screen menu.

MENU

This turns on and off the on-screen menu display.

RESIZE

This switches between the resizing screen and the window screen.

FREEZE

This freezes the screen.

SPECIAL

This displays the SPECIAL modes set on the on-screen menu.

Zoom mode: This enables the partial enlargement of the screen.

Preview mode: This allows the simultaneous display and selection of all input screens.

Strobe mode: Strobe is displayed.

HIDE

This performs the video mute of the screen. It is feasible to set the screen during the mute with either a pattern display or a black screen through the on-screen menu. If this button is pressed again, the picture can be projected.

MUTE

This mutes audio. Press this button again to bring the audio back.

VOL. (+, -)

This adjusts the volume of the internal speaker system.

POINTER

This is used for the operation of the on-screen menu. When the remote control unit is used as a mouse, it can move the mouse pointer on the computer.

L.(LEFT) BUTTON

This can be used as a left button of the mouse.

This is used for the operation of the on-screen menu.

R.(RIGHT) BUTTON

This can be used as a right button of the mouse.

This is used for the operation of the on-screen menu.

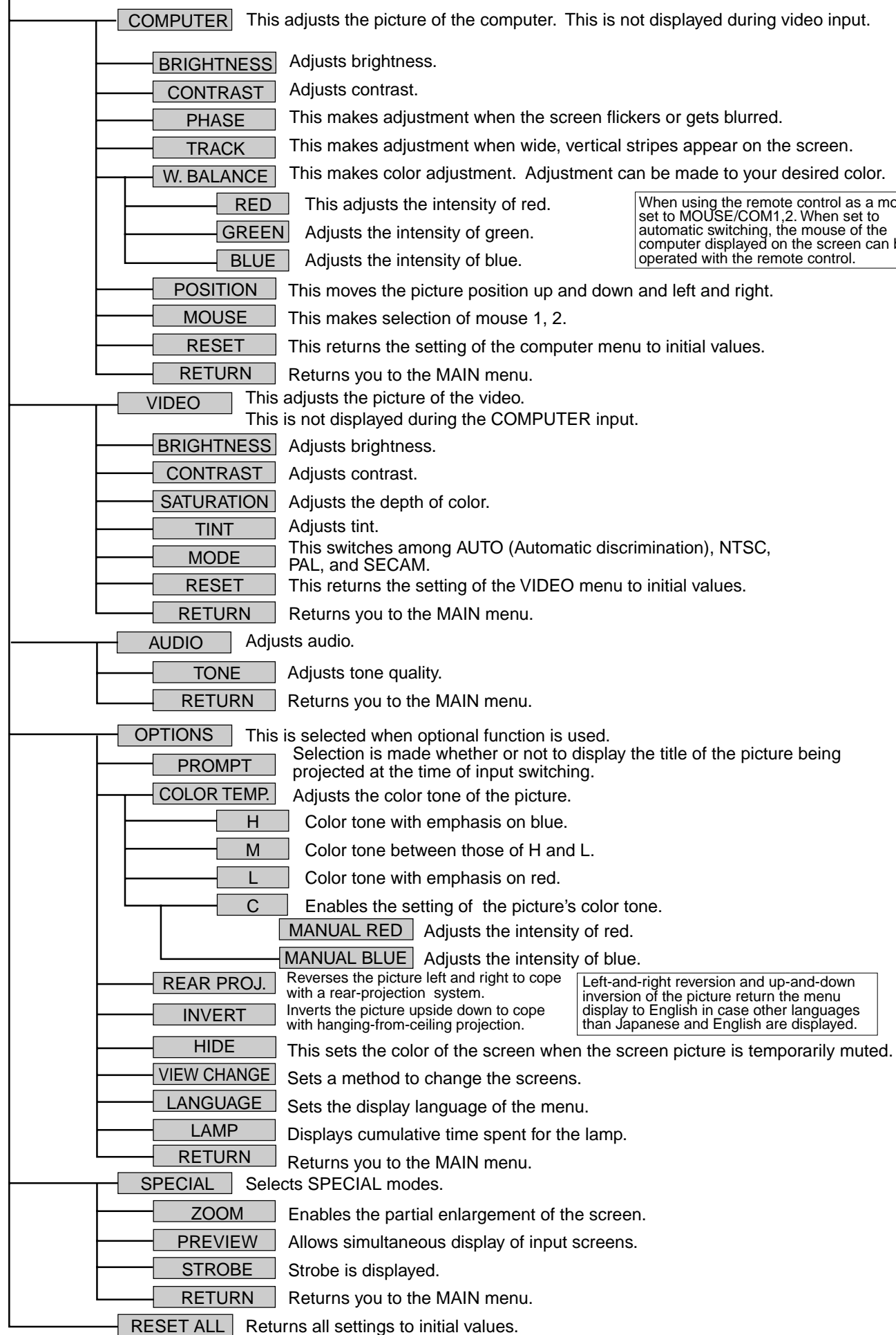
LIGHT BUTTON

When operating the remote control unit in a dark place, press this button. Then, the buttons on the keypad are kept illuminated for about 5 seconds.

After switching the picture, there are instances sometimes when the picture before switching remains on the screen. If so, press the [AUTO] button on the main unit or the remote control unit, or move the picture of [DISPLAY POSITION] on the screen menu up and down and left and right, and clear the remaining picture away.

System of ON-Screen Menu

MENU



English

Setting Method Through ON-Screen

Symbols for Common Operations in this Manual



Selection of the items and set values is made by moving the pointer of the remote control unit up and down.



This selects the items and sets values by moving the pointer of the remote control unit left and right.



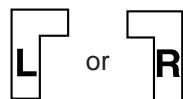
This selects the items and sets values by moving the right pointer of the remote control unit.



Left button of the remote control unit is pressed once.



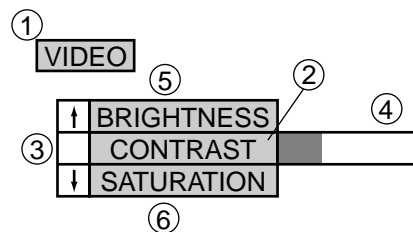
Right button of the remote control unit is pressed once.



Left or right button of the remote control unit is pressed. There is a case when the display on the screen points at the left button.

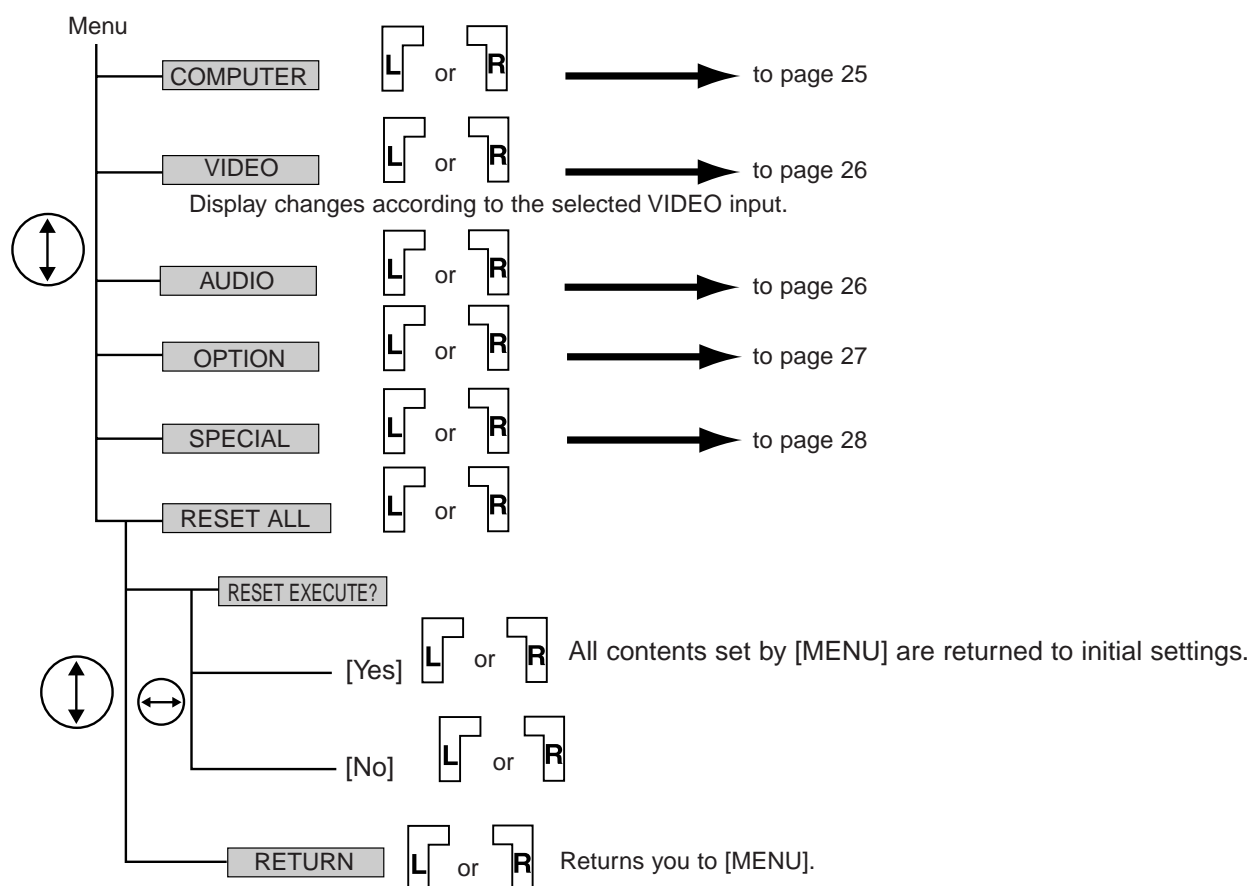
On-Screen Menu Display

- ① Name of the currently selected menu is displayed.
- ② Selected item is displayed. Background of the letter is yellow.
- ③ Operation method to change the set values is shown through a simplified illustration.
- ④ Set values are displayed both in graphs and texts.
- ⑤⑥ These are the items for neighbors on both sides that are not selected.



Operation of On-screen Menu and Notes

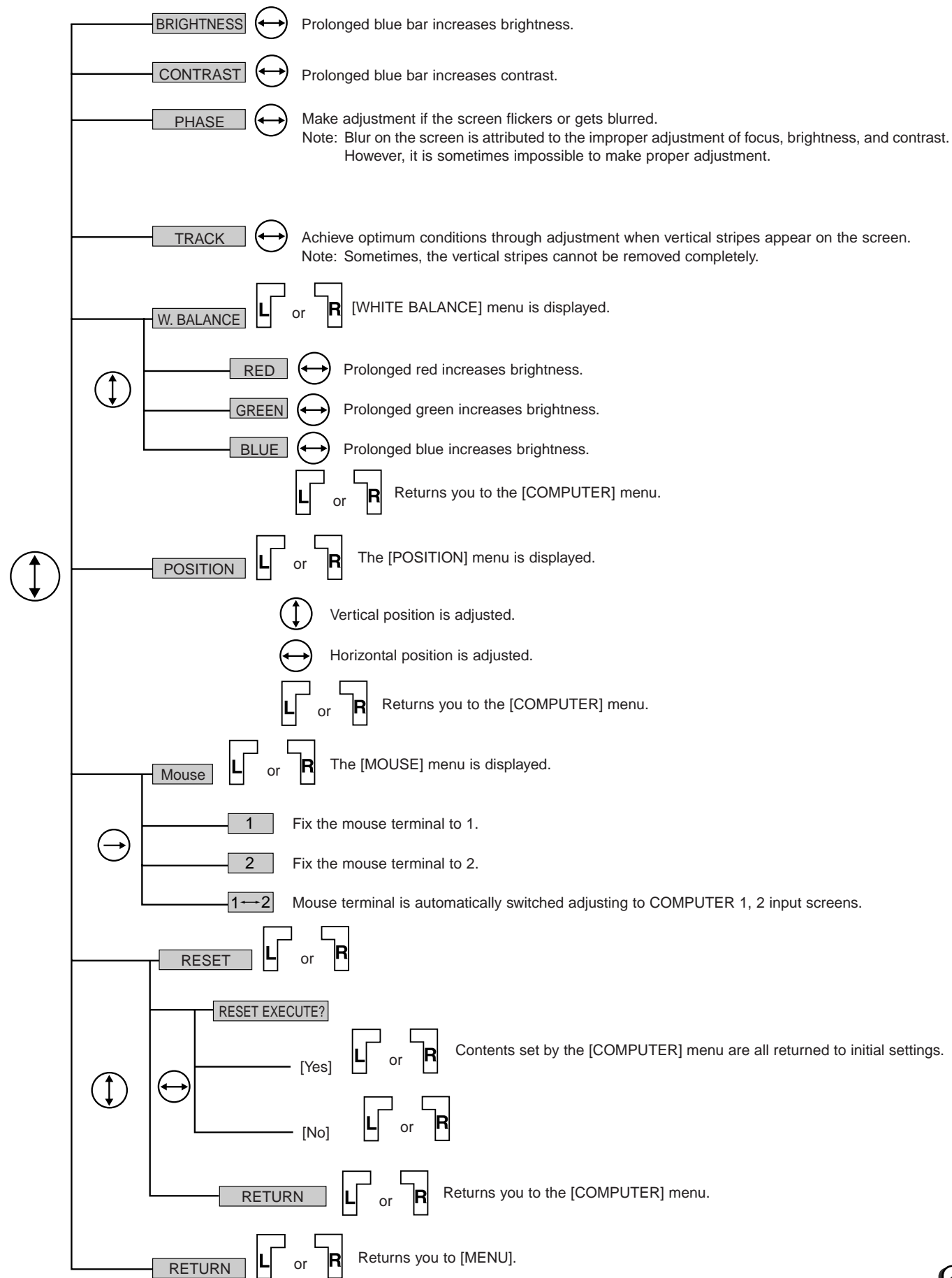
When the MENU button of the remote control unit is pressed, the [MENU] appears. If you press it again, the [MENU] disappears.



Setting Method Through ON-Screen

[COMPUTER] Menu

This is Not Displayed During Video Input Selection

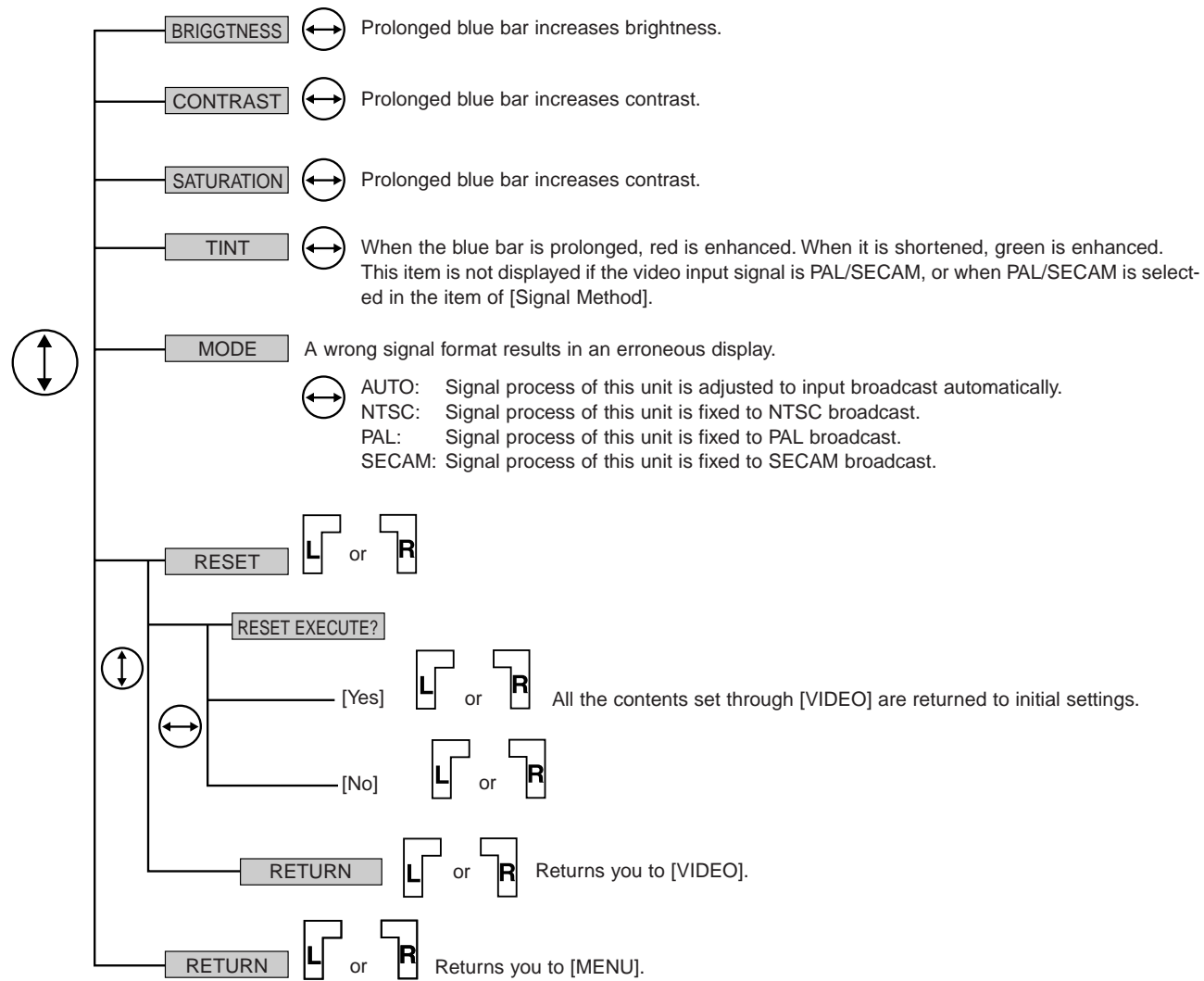


English

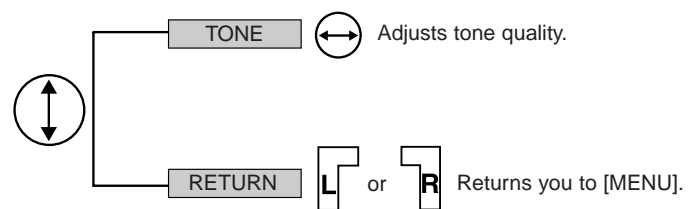
Setting Method Through ON-Screen

[VIDEO] Menu

This is not displayed during computer input selection.

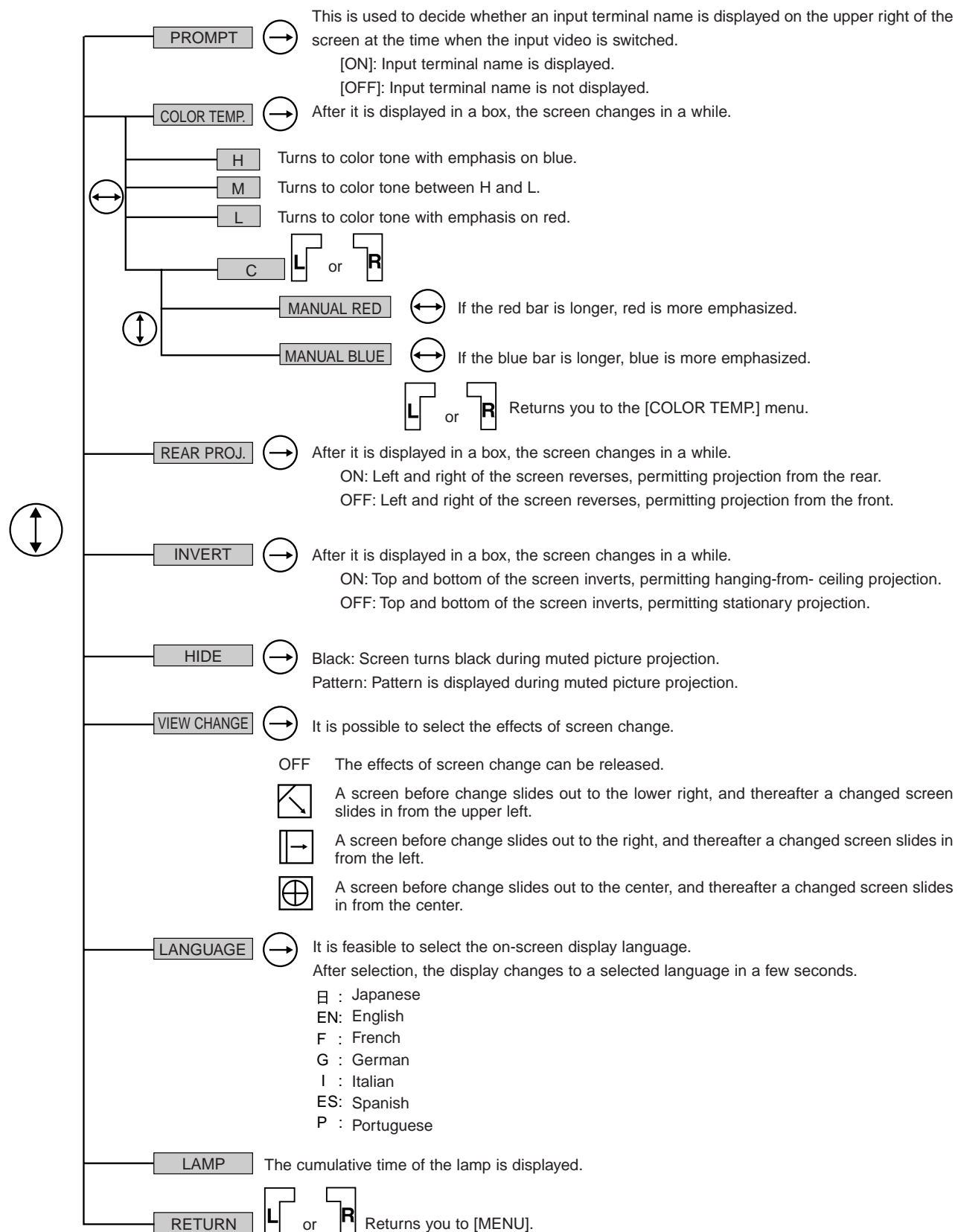


[AUDIO] Menu



Setting Method Through ON-Screen

[OPTION] Menu



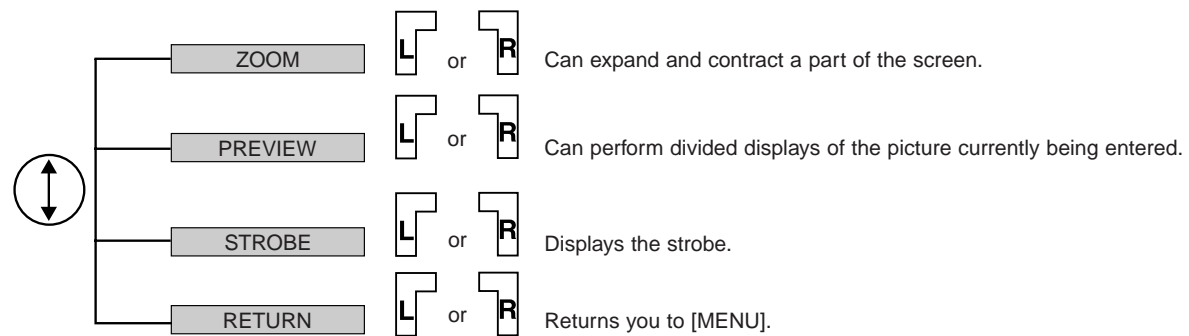
English

Left-and-right reversion and up-and-down inversion of the picture return the menu display to English in case other languages than Japanese and English are displayed.

Setting Method Through ON-Screen

[SPECIAL] Menu

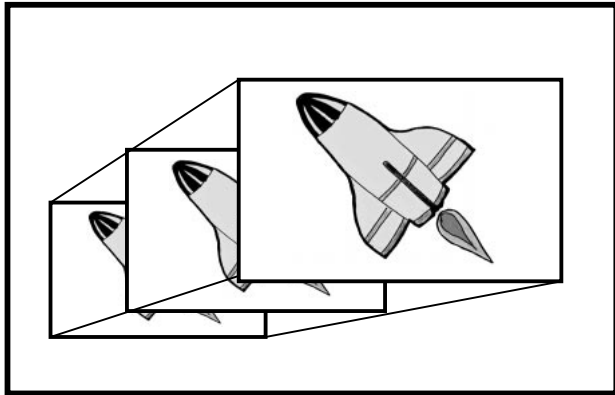
Mode allocation is made to the SPECIAL button of the remote control unit. Pressing the SPECIAL button executes a selected mode. Select any one of the 3 modes moving the pointer up and down, and make decision with the left or right button. In the item of the set mode, the display of [PRESENT SET] appears.



Have Fun With Special Modes

Modes can be executed by pressing the **SPECIAL** button on the key pad of the remote control unit. Press the **SPECIAL** button again to return to the normal screen.

Zoom Mode



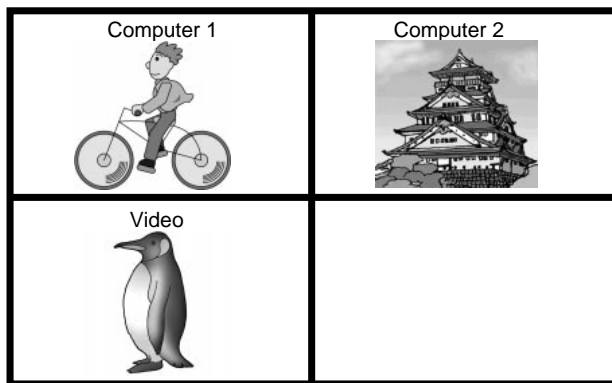
It is possible to enlarge a part of the screen to maximum 4 times in 12 steps.

L. (Left) button: Enlarge

R. (Right) button: Reduce

Pointer: Screen can be moved in 8 directions with the pointer.

Preview Mode



It is feasible to divide and display the state of **COMPUTER1, 2•VIDEO** input. It takes some time until the divided screens appear.

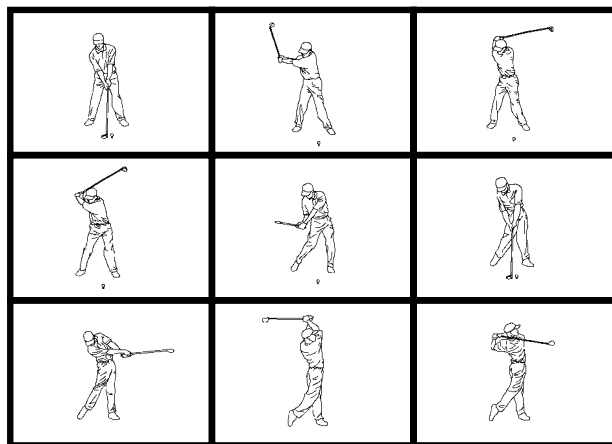
R. (Right) button:

Letters of picture selected on the input screen blink.

L. (Left) button:

Decision on the input screen.

Strobe Mode



A child screen (animation) is displayed on the upper left.

L. (Left) button:

This executes the strobe and resets the strobe screen. When the strobe is executed, the strobe screen (still picture) is kept displayed from the upper left laterally down to the lower right. After it is finished, another click resets the strobe mode and the child screen (animation) is displayed on the upper left.

R. (Right) button:

This displays the [STROBE] menu. Items can be selected by moving the pointer up and down. It is also possible to execute the strobe mode while keeping the menu displayed.

Number of frames: Desired number of frames is selected out of [4, 9, 16] by moving the pointer to the left and right. Hide of the selected value turns blue.

TIME Interval : Value changes as [100, 200, 300, 400, 500, 600, 700, 800, 900,1000 msec] by moving the pointer to the left and right.

Replacing Illumination Lamp

An illumination lamp has its service life. Service life of the illumination lamp is approximately 2,000 hours.

Deterioration advances abruptly when it exceeds its service life. If the use of the illumination lamp exceeds 1,900 hours, the lamp indicator on the main unit begins to blink in orange and red. In addition, the display of [LAMP REPLACE] appears on the screen for 30 seconds, and the display of [LAMP] of the on-screen menu changes to red every time the illumination lamp is lit up. You must either replace it with a new illumination lamp or prepare for the replacement of the illumination lamp. When it reaches 2,000 hours, the lamp indicator on the main unit lights up in red, and even if the OPERATE button is pressed (OPERATE button in case of the remote control unit), the illumination lamp does not light up. Although the replacement period of the illumination lamp is about 2,000 hours, the period can change, depending on use conditions. Even when tint and brightness are adjusted through the remote control unit, if the picture is dark and the tint is abnormal, replace the illumination lamp a little earlier than usual. If you wish to buy the illumination lamp (BHNEELPLP04), consult with the store where you bought the unit or JVC Service Center.

CAUTION



When this unit is installed at a place where operation is difficult, the replacement of the illumination lamp at the place can result in injury. Relocate the main unit to another place where there is a sufficiently wide space to replace the illumination lamp.



Use a genuine product for the illumination lamp. Otherwise, troubles can occur. Furthermore, never reuse a used illumination lamp. Use of the used illumination lamp can result in remarkably reduced performance and in mechanical failure due to an explosion. Shattered or scattered fragments can also result in injury during the replacement of the illumination lamp.

1. Turn off power.

After the operation indicator lights up in orange, unplug the power cord from the outlet as well as the main unit. Cool the main unit down for more than 1 hour.

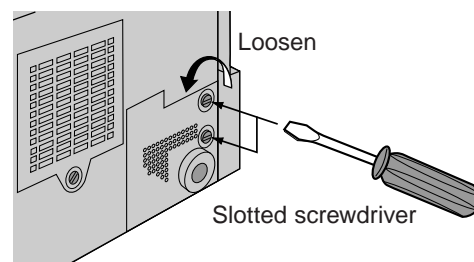
WARNING



Be sure to turn off the main switch and unplug the power cord from the outlet before replacing the illumination lamp. Work with the power cord plugged can result in injury and electric shock.

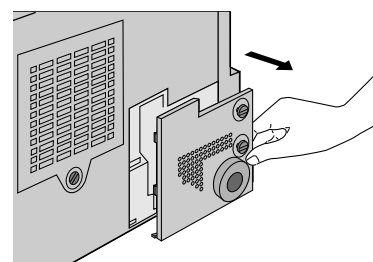
2. Unscrew and detach the cover of the replacement aperture

Two screws can be loosened with a slotted screwdriver, etc.



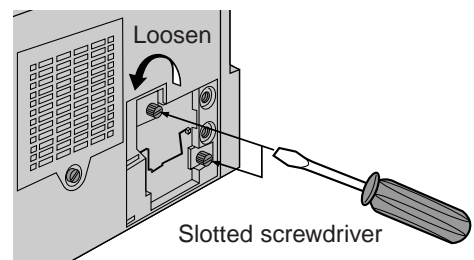
3. Unscrew and remove the lamp unit

Two screws can be loosened with a slotted screwdriver, etc.



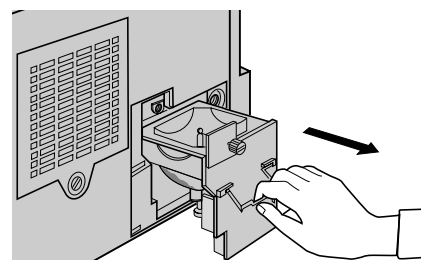
4. Install the lamp unit and tighten screws

Two screws can be tightened with a slotted screwdriver, etc.



5. Attach the cover of the lamp replacement aperture and tighten the screws

Two screws can be tightened with a slotted screwdriver, etc.



CAUTION

A safety switch works and disables operation unless the cover of the lamp replacement aperture and the lamp unit are completely closed.

Replacing Air Filter

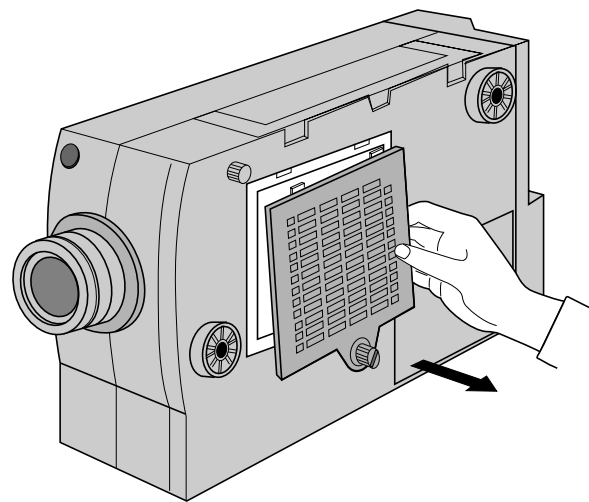
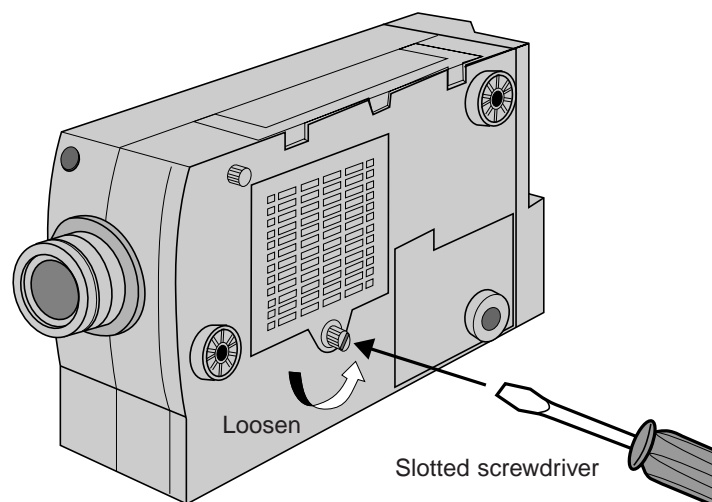
The filter (BHD0056) must be replaced on a periodic basis. When dust particles enter into the inside and their shadows appear on the screen, you cannot enjoy a picture. Under such circumstances, consult with the store where you bought the unit or the nearest JVC Service Center.

1. Turn off power

After the operation indicator lights up in orange, unplug the power cord from the main unit as well as the outlet.

2. Remove air filter

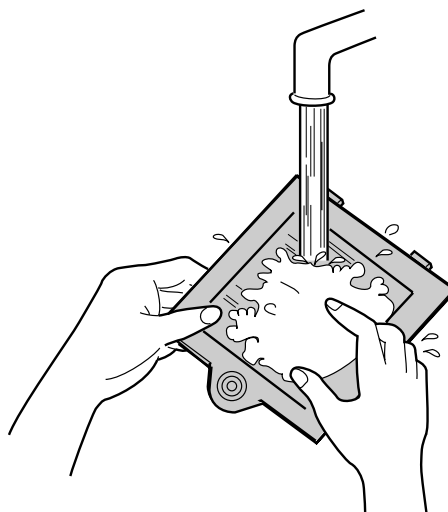
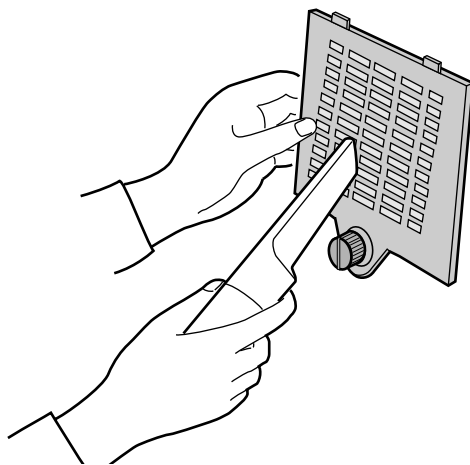
A screw can be loosened with a slotted screwdriver.



English

3. Clean up air filter

Clean up dust with a vacuum cleaner. Wash the air filter with detergent diluted in water if it is extremely soiled, and dry it in the shade.



4. Install the air filter

A screw can be fastened with a slotted screwdriver, etc.


CAUTION


Wear rubber gloves when using detergent.
When sucking dust into a vacuum cleaner, do so from the obverse (outside this unit). If dust is sucked in from the reverse, sometimes the filter can come off due to the suction power of the air cleaner.

Troubleshooting

Self-diagnosis by Indicators

(Refer to [Warning Display by Indicators] in P.20.)

Operation Indicator 
Orange blinking: Operation in high temperature
Red blinking: Internal abnormality
Red lighting: Stop because of high temperature and abnormality

Lamp Indicator 
Alternate blinking in orange and red: Nearing the end of lamp's service life, requiring lamp replacement
Blinking in orange: Projector is being cooled
Red lighting: End of lamp's service life, requiring lamp replacement
Red blinking: Abnormality of the lamp or the power supply for the lamp.

	SYMPTOM	CAUSE	REMEDY	page
POWER SUPPLY	Power cannot be turned on.	• Power cord is disconnected.	• Plug the power cord firmly.	20
		• Main switch is off.	• Turn main switch on.	21
		• Cover for lamp replacement aperture is not completely closed.	• Close cover properly.	30
		• Filter is not properly installed.	• Install filter properly.	31
		• Expiration of lamp's service life.	• Replace lamp.	30
	No light comes out.	• Lens cap is not removed.	• Remove lens cap.	21
PROJECTOR	No picture comes out.	• Air inlet and hot air outlet are blocked.	• Remove obstacles.	8, 9
		• AV cable is not properly plugged into VIDEO input terminal	• Carry out proper plugging.	15 ~ 17
		• VIDEO, COMPUTER1, 2 are not properly selected.	• Adjust to COMPUTER when connected to computer and adjust to VIDEO when AV unit is connected.	22
	Picture blurs.	• Brightness is not properly set.	• Make adjustment with brightness of ON-SCREEN menu.	25, 26
		• Out of focus	• Make accurate adjustment with lens focusing ring (front).	18, 19
	Picture is messed up.	• Projector is too close to or too far away from screen.	• Set projector at right distance.	18, 19
• Mode is improperly selected.		• Adjust the mode.	26	
• Input frequency of picture is not adjusted.		• Check output frequency of COMPUTER and enter corresponding signals.	12	
REMOTE CONTROL UNIT	Remote control does not function.	• Batteries are not properly loaded.	• Load batteries properly as indicated by + and – labels.	10
		• Batteries are weak.	• Replace with new batteries.	10
		• Path between remote control unit and remote control signal receiver is blocked.	• Remove blocking obstacles from path.	11
		• Distance is too far from projector.	• Move closer to projector for better transmission.	11



This unit employs a microcomputer. There are occasions when this unit does not operate normally due to noise from the outside. Under such circumstances, turn the power off, and unplug the power cord from the outlet. Then, plug the power cord in again, and find out how it functions.

Specifications

● Optical System

- **Projection system:** 3-color liquid crystal shutter
- **LCD panel:**
 - Size: 1.3 inch (diagonal)
 - Number of pixels: 1440000
 - (800 (H) × 600 (V) × 3 LCDs)
 - Number of effective pixels: More than 99.998%
 - (Pixels with constant light-up of less than 0.002% LCD pixel defect can occur.)
- **Projection lens:**
 - 1.3× manual zoom
 - f=45 mm ~ 59 mm
 - F=2.5 ~ 2.9
- **Screen size:**
 - 23 inches ~ 300 inches
 - (Diagonal length 51 mm ~ 762 mm)
 - Aspect ratio 4:3
- **Illumination lamp:** UHE lamp (illuminated with 150W DC)

● Electrical System

- **COMPUTER1/COMPUTER2 (COMPUTER system)** **Sync. signal** Separate/composite
Input Output TTL level (positive/negative)
DOS/V or IBM PC/AT compatible machine

Video input signal

Signal format Analog RGB
Video signal R:0.7Vp-p/75 Ω
 G:0.7Vp-p/75 Ω
 B:0.7Vp-p/75 Ω

Vertical frequency EGA,VGA,VESA:72/75/85
 SVGA:56/60/72/75/85
 XGA:60/70/75/85
 MAC: 13" /16" /19"

Sync. signal Separate/composite/sync-
 on-green automatic switching
 TTL level (positive/negative)

Video input terminal COMPUTER1 D-sub 15Pin
 (HD- 15 core).....1
 COMPUTER2 D-sub 15Pin
 (HD- 15 core).....1

Video output signal Signal format
 Analog RGB

Video signal R:0.7Vp-p/75 Ω
 G:0.7Vp-p/75 Ω
 B:0.7Vp-p/75 Ω

Video output terminal

D-sub 15Pin
 (HD- 15 core).....1
 (Common terminal is used for
 COMPUTER1 and COMPUTER2)

Audio input signal 500mVrms/47K Ω

Audio input terminal AUDIO-1
 3.5 mm diameter stereo mini jack (1)
 AUDIO-2
 3.5 mm diameter stereo mini jack (1)

• **S-Video input**
Input signal Luminance 0.714Vp-p
 Chrominance 0.284Vp-p

Input terminal S terminal (mini DIN 4Pin)

Audio input signal 500mVrms/47K Ω
 for common use with Audio L
 (monaural)/R

Audio input terminal Audio L (monaural)
 RCA jack (white).....1
 Audio R
 RCA jack (red)1

English

Specifications

• Composite Video input

Input signal RCA jack (yellow)1

Input terminal 1.0Vp-p

Audio input signal Terminal is for common use with S-Video

• Audio output

(COMPUTER1/2 for common use with S-Video/composite)

Output signal 0 ~ 500 mVrms

Load impedance 600 Ω

Output terminal 3.5 mm diameter stereo mini jack

● SPEAKER

Output: 2W \times 2 (stereo-compatible)

● REMOTE CONTROL TERMINAL

This is used for connection with an external signal receiver of the remote control unit.

The external signal receiver is not available as a merchandise. Consult with Victor Service Office.

● MOUSE OUTPUT

This is connected to the personal computer using the accessory cable for exclusive use.

● OTHERS

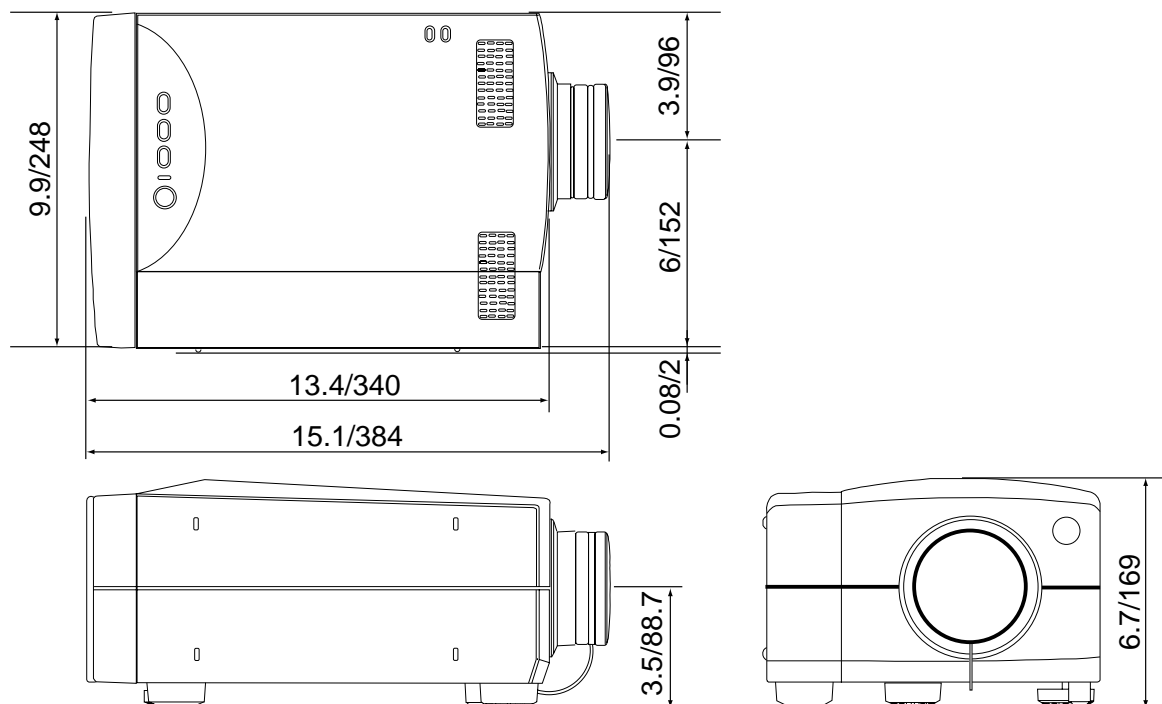
- Power supply: AC 100-120V \sim 50/60 Hz
- Power consumption: 240W
- Mass: 14.8 lbs/6.7 kg
- Allowable operating temperature and humidity: From 42°F/5°C to 104°F/40°C (20% ~ 80%) with no condensation.
- Allowable storage temperature and humidity: From 6°F/ -10°C to 140°F/60°C (10% ~ 90%) with no condensation.

● REMOTE CONTROL UNIT

- Power supply: DC 3V (AA/R6/UM-3 batteries \times 2 pieces)
- Mass: 4.6 oz/130 g (including batteries)
- External dimensions: 2"/49 mm(W) \times 8¹/₄"/207 mm(D) \times 3/4"/22 mm(H)

External Dimensions

(Unit: inch/mm)



Note:

The specification and appearance for this machine are subject to improvement without prior notice.

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