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PROJECTOR OWNER'S MANUAL

Dukane

8942

Need a replacement lamp for this projector?

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DUKANE

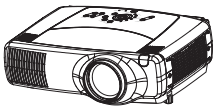
Liquid Crystal Projector
Models 8935/8942

USER'S MANUAL

Please read this user's manual thoroughly
to ensure correct usage through understanding.

Projector

8935/8942
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.

NOTE • The information in this manual is subject to change without notice.
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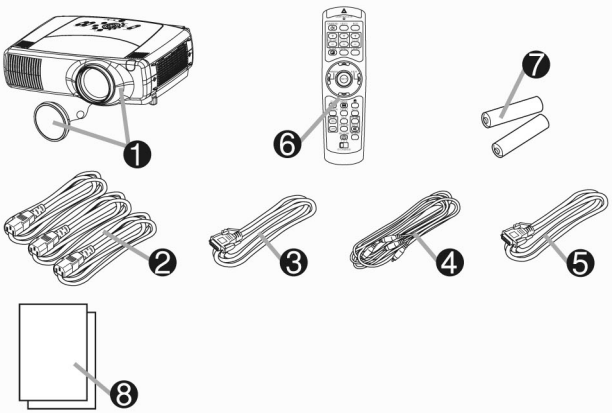
Contents Of Package



❶ Projector & Lens Cap
❷ Power cords (UK, US, Europe)
❸ RGB cable
❹ Video/Audio cable
❺ M1-D cable
❻ Remote control
❼ Batteries
(for the remote control)
❽ User's Manuals
(Safety Guide
Quick Guide
Operating Guide)

Projector Features

This multimedia projector is used to project various computer signals as well as NTSC/PAL/SECAM video signals onto a screen. Little space is required for installation and large images can easily be realized.

Ultra High Brightness
Crisp, ultra-bright presentations is achieved by using a UHB (ultra high brightness) lamp and a highly efficient optical system.

Whisper Mode Equipped
Special mode is available for reducing projector noise to achieve quieter operation.

User Memory Function
This projector can memorize 4 settings by MY MEMORY function.

Partial Magnification Function
Interesting parts of images can be magnified for closer viewing.

Keystone Distortion Correction
Quick correction of distorted images electrically.

Optical Lens Shift
The lens of this projector can be shifted vertically. When you want to finely adjust the picture position, use the LENS SHIFT buttons.

Preparation

Please see the “Contents Of Package” on page 1.
Your projector should come with the items shown there. Contact your dealer anything is missing.

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

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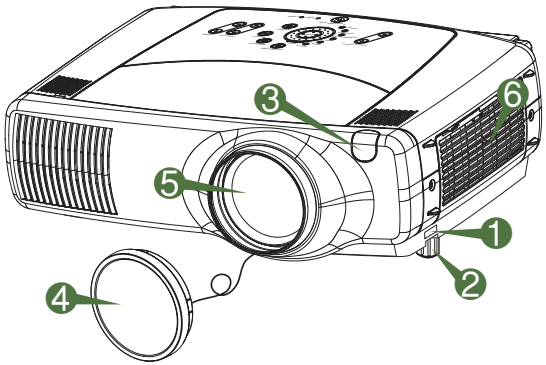
TECHNICAL

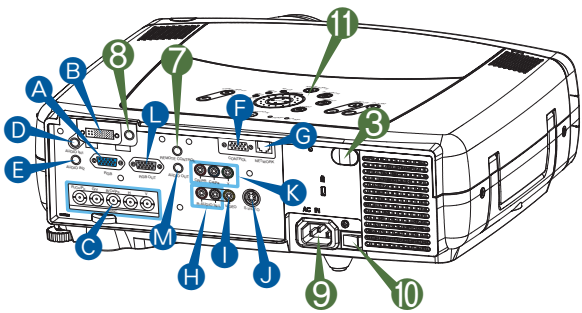
Part Names

Projector



Projector (Front/Right)

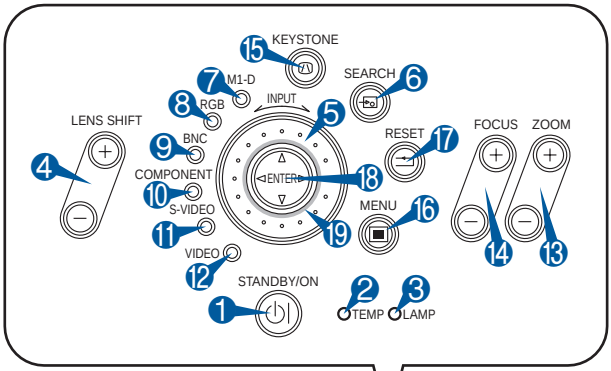
❶ Elevator button
❷ Elevator foot
❸ Remote sensor
❹ Lens cap
❺ Lens
The picture is projected from here.
❻ Filter cover
An air filter is inside.



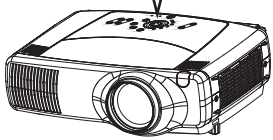
Projector (Rear/Left)

Ⓐ RGB port
Ⓑ M1-D port
Ⓒ BNC port
Ⓓ AUDIO IN 1 port
Ⓔ AUDIO IN 2 port
Ⓕ CONTROL port
Ⓖ NETWORK port
Ⓗ AUDIO IN R/L port
Ⓘ VIDEO IN port
Ⓙ S-VIDEO port
Ⓚ COMPONENT port
Ⓛ RGB OUT port
Ⓜ AUDIO OUT port
❼ REMOTE CONTROL port
❽ DC OUT port
❾ AC Inlet
❿ Power switch
⓫ Control buttons
See the following page.

Control Buttons



Control Panel on the Projector



❶ STANDBY/ON button and STANDBY/ON indicator
❷ TEMP indicator
❸ LAMP indicator
❹ LENS SHIFT buttons
❺ INPUT dial
❻ SEARCH button
❼ M1-D indicator
❽ RGB indicator
❾ BNC indicator
❿ COMPONENT indicator
⓫ S-VIDEO indicator
⓬ VIDEO indicator
⓭ ZOOM buttons
⓮ FOCUS buttons
⓯ KEYSTONE button
⓰ MENU button
⓱ RESET button
⓲ ENTER button
⓳ Cursor buttons ▲/▼/◀/▶

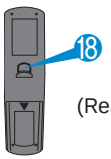
Remote Control

❶ STANDBY/ON button

❹ LENS SHIFT buttons

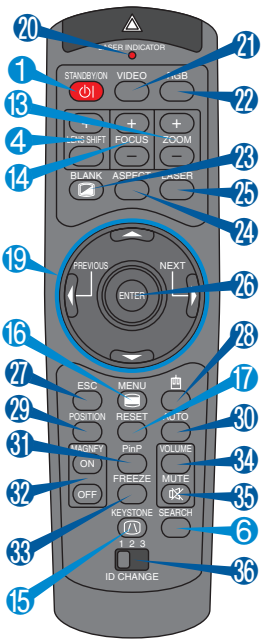
❻ SEARCH button

⓭ ZOOM buttons
⓮ FOCUS buttons
⓯ KEYSTONE button
⓰ MENU button
⓱ RESET button
⓲ ENTER button
(Mouse left button)



(Rear)

⓳ Cursor buttons
▲/▼/◀/▶
(Keyboard Arrow keys ↑/↓/←/→)



Remote Control

⓴ LASER INDICATOR
㉑ VIDEO button
㉒ RGB button
㉓ BLANK button
㉔ ASPECT button
㉕ LASER button
㉖ Cursor buttons ▲/▼/◀/▶
(Mouse move pointer)
㉗ ESC button
(Keyboard ESC key)
㉘ (Mouse right button)
㉙ POSITION button
㉚ AUTO button
㉛ PinP button
㉜ MAGNIFY buttons
㉝ FREEZE button
㉞ VOLUME button
㉟ MUTE button
㊱ ID CHANGE switch

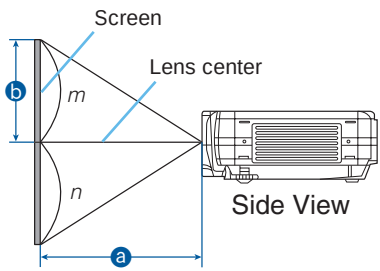
Setting Up

Arrangement

⚠ **WARNING** • Before installation, make sure that the projector is turned off and the power code is disconnected.
- Do not set up and move the projector, while it is hot.
- Install the projector in a suitable environment according to instructions of the “User’s Manual – Safety Guide” and this manual.
- The power outlet should be close to the projector and easily accessible.

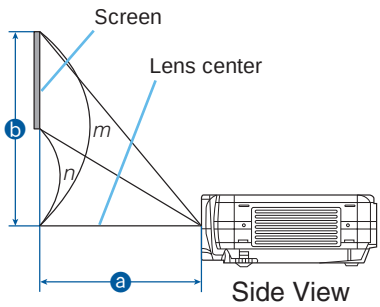
Refer to the illustrations and tables below to determine the screen size and projection distance. The values shown in the table are calculated for a full size screen. (±10%)

Reference for the 4:3 aspect ratio



Screen Size [inch (m)]	ⓐ [inch (m)]		ⓑ [inch (cm)]	
	Min.	Max.	m:n=1:1	m:n=10:0
40 (1.0)	46(1.2)	71(1.8)	12(30)	24(61)
60 (1.5)	71(1.8)	107(2.7)	18(46)	36(91)
70 (1.8)	83(2.1)	126(3.2)	21(53)	42(107)
80 (2.0)	95(2.4)	144(3.7)	24(61)	48(122)
100 (2.5)	120(3.0)	181(4.6)	30(76)	60(152)
120 (3.0)	144(3.7)	217(5.5)	36(91)	72(183)
150 (3.8)	181(4.6)	272(6.9)	45(114)	90(229)
200 (5.1)	243(6.2)	364(9.2)	60(152)	120(305)
250 (6.4)	304(7.7)	455(11.6)	75(191)	150(381)
300 (7.6)	366(9.3)	547(13.9)	90(229)	180(457)
350 (8.9)	427(10.9)	638(16.2)	105(267)	210(533)
400 (10.2)	489(12.4)	730(18.5)	120(305)	240(610)
500 (12.7)	612(15.5)	913(23.2)	150(381)	300(762)

Reference for the 16:9 aspect ratio



Screen Size [inch (m)]	ⓐ [inch (m)]		ⓑ [inch (cm)]	
	Min.	Max.	m:n=1:1	m:n=10:0
40 (1.0)	50(1.3)	77(2.0)	10(25)	23(58)
60 (1.5)	77(2.0)	117(3.0)	15(37)	34(87)
70 (1.8)	91(2.3)	137(3.5)	17(44)	40(102)
80 (2.0)	104(2.6)	157(4.0)	20(50)	46(116)
100 (2.5)	131(3.3)	197(5.0)	25(62)	57(145)
120 (3.0)	158(4.0)	237(6.0)	29(75)	69(174)
150 (3.8)	198(5.0)	297(7.5)	37(93)	86(218)
200 (5.1)	265(6.7)	396(10.1)	49(125)	114(291)
250 (6.4)	332(8.4)	496(12.6)	61(156)	143(363)
300 (7.6)	399(10.1)	596(15.1)	74(187)	172(436)
350 (8.9)	466(11.8)	696(17.7)	86(218)	200(508)
400 (10.2)	533(13.5)	795(20.2)	98(249)	229(581)
450 (11.4)	600(15.2)	895(22.7)	110(280)	257(654)

Adjusting The Projector's Elevator

⚠ **WARNING** • Do not touch about the lens and ventilation openings during use or immediately after use to prevent a burn.

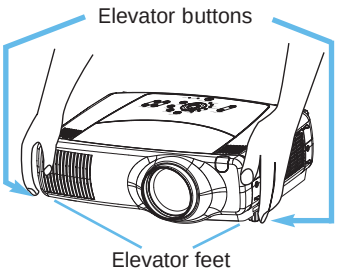
⚠ **CAUTION** • To prevent damaging the projector and injuring yourself, always hold the projector whenever using the elevator buttons to adjust the elevator feet.

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.

2 Raise or lower the projector to the desired height and then release the elevator buttons.
When you release the elevator buttons, the elevator feet will lock into position.

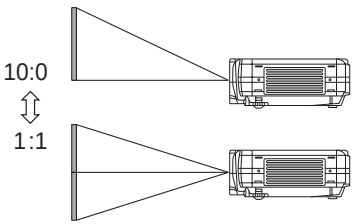
3 As necessary, you can also finely adjust the height of the projector by twisting the elevator feet by hand.

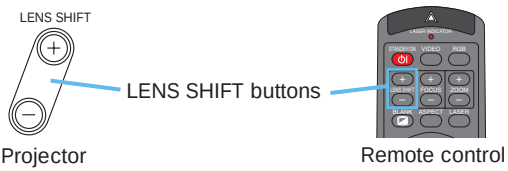


Using The Lens Shift Buttons

NOTE • Generally, better quality of a picture is available when the lens shift is set to the center.

The lens of this projector can be shifted vertically. When you want to finely adjust the picture position, use the LENS SHIFT buttons of the projector.





Connecting Your Devices

⚠ **WARNING** • Whenever attempting to connect other devices to the projector, read thoroughly the "User's Manual - Safety Guide", this manual and the manual of each device to be connected. Incorrect connecting could result in fire or electrical shock.

⚠ **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.

ATTENTION • 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. Refer to the section “Technical” of this manual for the pin assignment of connectors and RS-232C communication data.

- Some cables have to be used with core set. Use the accessory cable or a designated-type cable for the connection. For cables that have a core only at one end, connect the core to the projector.
- Secure the screws on the connectors and tighten.
- 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.

NOTE • Some computers may have multiple display screen modes. Use of some of these modes may not be compatible with this projector.

- For some RGB input 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 TFT monitors to change the resolution.

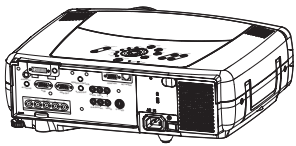
NOTE **Plug-and-Play Capability**

- Plug-and-Play is a system incorporated in the computer, its operating system and peripheral equipment (i.e. display devices).
- This projector is compatible with VESA DDC 1/2B. 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 1/2B 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.

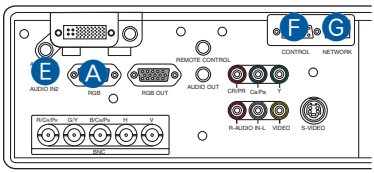
Setting Up (continued)

Please refer to the following (for example) for connecting your devices. See the rear of the projector. You can see the ports.

Examples of connection with a computer

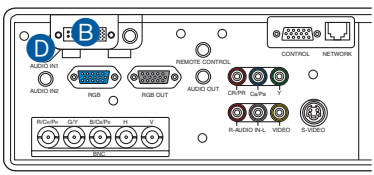


Computer		Projector	
RGB out	RGB cable	RGB	A
Audio out	Stereo Mini cable	AUDIO IN 2	E
RS-232C port	RS-232C cable	CONTROL	F
Network port	CAT-5 cable	NETWORK	G



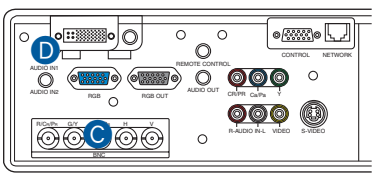
■ If using a M1-D input (to mouse control)

DVI port	M1-D cable	M1-D	B
USB port			
Audio out	Stereo Mini cable	AUDIO IN 1	D



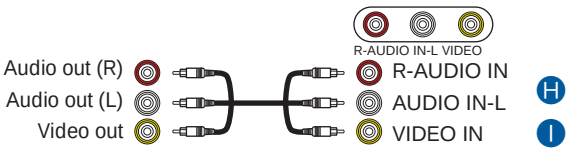
■ If using a BNC input

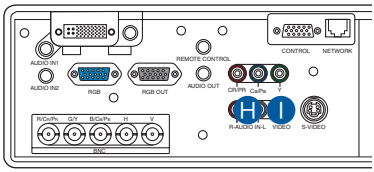
		R/C$_R$/P$_R$ G/Y B/C$_B$/P$_B$ H V	C
RGB out	BNC cable	R/C$_R$/P$_R$ G/Y B/C$_B$/P$_B$ H V	
Audio out	Stereo Mini cable	AUDIO IN 1	D



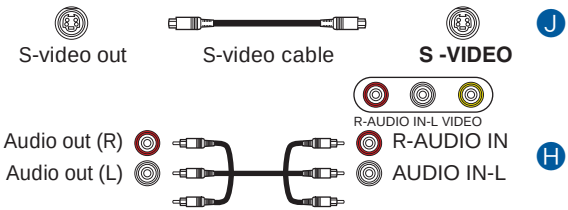
Examples of connection with a VCR/DVD Player

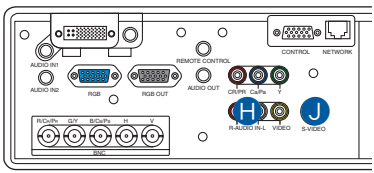
VCR/DVD Player **Projector**



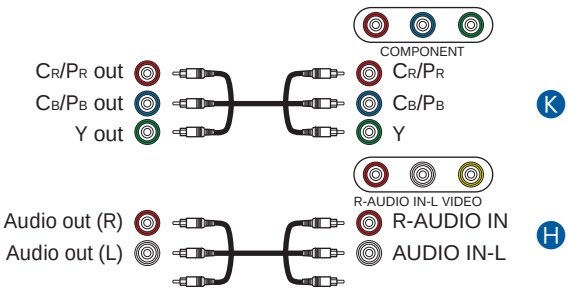


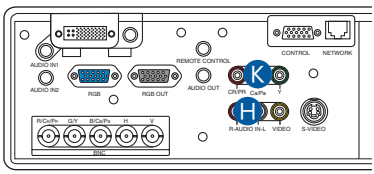
■ If using a s-video signal



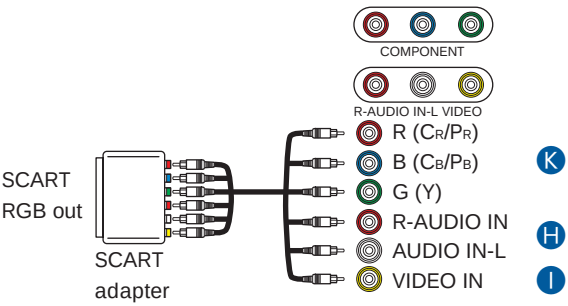


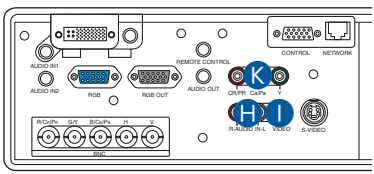
■ If using a component signal





■ If using a SCART RGB input





Connecting to a monitor

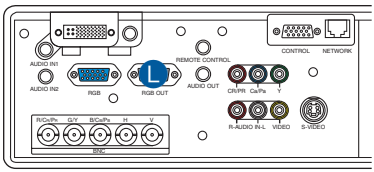
Monitor

RGB in

RGB cable

Projector

RGB OUT Ⓛ



Connecting to a speaker (with amplifier)

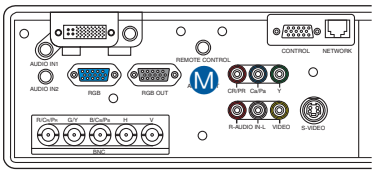
Speaker

◎ Audio in

Stereo Mini cable

Projector

◎ **AUDIO OUT** Ⓜ



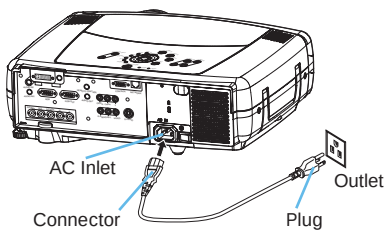
Connecting The Power Supply

⚠ **WARNING** • Use extra caution when connecting the power cord as incorrect or faulty connections may result in fire and/or electrical shock. Please adhere to the "User's manual – Safety Guide" and the following.

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

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.

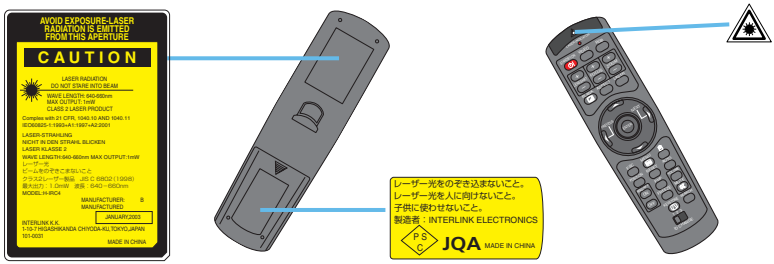


Remote Control

About The Laser Pointer

⚠ **WARNING** • The laser pointer of the remote control is used in place of a finger or rod. Never look directly into the laser beam outlet or point the laser beam at other people. The laser beam can cause vision problems.

⚠ **CAUTION** • Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



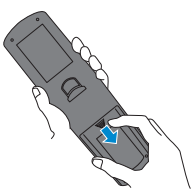
This remote control has a laser pointer in place of a finger or rod. The laser beam works and the LASER INDICATOR lights while the LASER button is pressed.

Putting Batteries

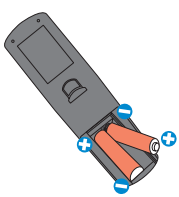
⚠ **CAUTION** • About the battery

- Keep a battery away from children and pets.
- Use only the battery specified: two AA batteries.
- Do not mix new battery with used one.
- Make sure the plus and minus terminals are correctly aligned when loading the battery (as indicated in the remote control).
- Dispose of batteries in accord with environmental laws.

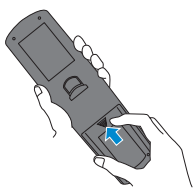
1 Remove the battery cover.
Slide back and remove the battery cover in the direction of the arrow.



2 Insert the batteries.
Align and insert the two AA batteries according to their plus minus terminals (as indicated in the remote control).



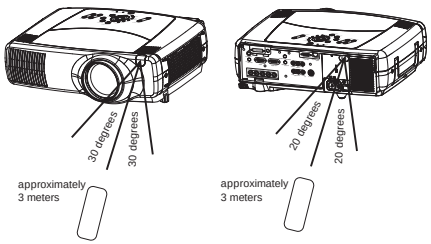
3 Close the battery cover.
Replace the battery cover in the direction of the arrow and snap it back into place.



Operating The Remote Control

CAUTION • Do not disassemble the remote control.
• Do not place the remote control near the projector's lens, fan, or vents.
• 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 on it. Doing so may result in malfunction.
• 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.

NOTE • Replace the batteries whenever the remote control starts to malfunction.
• When strong light, such as direct sunlight or light from an extremely close range (such as from an inverter fluorescent lamp), hits the projector's remote sensor, the remote control may cease to function. 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.
- **Front remote sensor** is 3 meters with a 60 degree range (30 degrees to the left and right of a remote sensor).
  Rear remote sensor is 3 meters with a 40 degree range (20 degrees to the left and right of a 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.

memo You can use the remote control as a wired remote control, by connecting the REMOTE CONTROL ports of the main unit and remote control via an audio cable (3.5 dia. stereo mini cable with plugs).

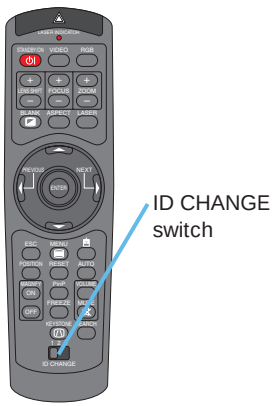
Using The Remote ID Feature

This is the function to properly use when you use two or three same type projectors at the same time. This function should be used combining a setup of a projector.

1 Set the ID number to the projector beforehand, referring to the item "IR REMOTE ID" of the section "OPTION Menu".

memo When the ALL is selected to the item "IR REMOTE ID" of the OPTION menu, the projector is controlled by a remote control irrespective of the position of the ID CHAGE switch.

2 Slide the knob of the switch into the position of the ID number of the projector you want to control.



Using The Mouse/Keyboard Control Function

⚠ **CAUTION** • Before connecting, read the manuals of the device you will connect. Mistaken use of the mouse/keyboard control could damage your equipment.
• Only connect to a PC.
• Do not unplug the connector cables while the computer is operating.

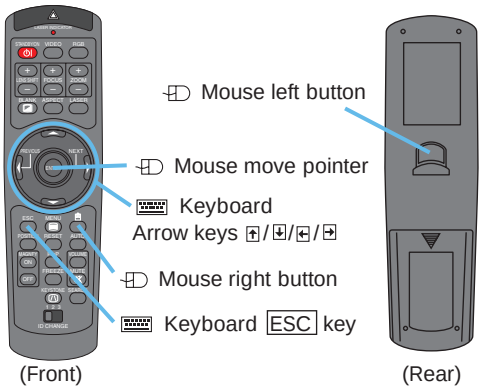
Using the USB control feature, you can use the remote control as a simplified mouse or keyboard of the computer.

Connect the M1-D port of the projector to the computer via the M1-D cable. Then functions illustrated below will be enabled.

memo The USB control can be used with Windows 95 OSR 2.1 or higher. It may not be possible to use the remote control, depending on the computer's configurations and mouse drivers.

memo The function can be used only for the functions illustrated on the right.

memo The projector would be enumerated as a mouse and a keyboard of HID (Human Interface Device) class devices, after connecting cable.



Power ON/OFF

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/off in right order. Please power on the projector before the connected devices. Power off the projector after the connected devices.

Turning On The Power

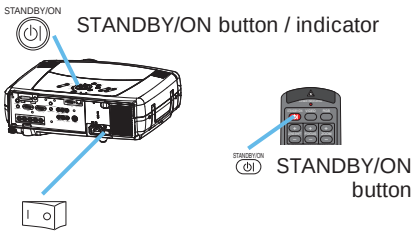
1 Remove the lens cap.

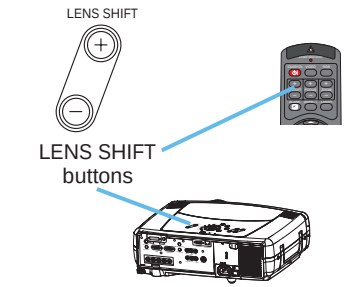
2 Set the power switch to [I] (ON).
The STANDBY/ON indicator will light to solid orange.

3 Press the STANDBY/ON button.
The projector lamp will light up and the STANDBY/ON indicator will begin blinking green. When the power is completely on, the indicator will stop blinking and light green.

4 Use the LENS SHIFT buttons to shift the picture upward or downward.

5 Select an input signal according to the section “Selecting An Input Signal” of the following page.





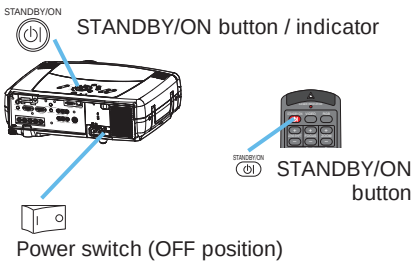
Turning Off The Power

1 Press the STANDBY/ON button.
The message “Power off?” will appear on the screen for approximately 5 seconds.

2 Press the STANDBY/ON button again while “Power off?” the message is visible.
The projector lamp will go off, and the STANDBY/ON indicator will begin blanking orange. Then the STANDBY/ON indicator will stop blinking and light to solid orange when the lamp cooling is complete.

3 Switch the power switch to [O] (OFF).
The STANDBY/ON indicator will go off.

4 Attached the lens cap.



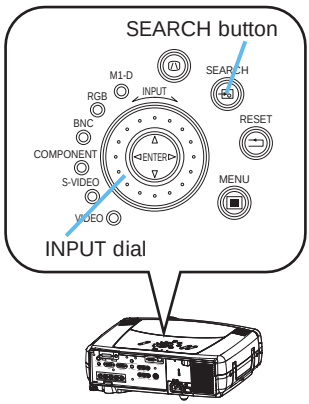
Selecting An Input Signal

1 Select an input signal.

■ Using the INPUT dial

Turn the INPUT dial of the projector.
Turning the dial cycles through the input ports as shown below. Select the signal you wish to project.

M1-D ⟷ RGB ⟷ BNC
⇕ ⇕
VIDEO ⟷ S-VIDEO ⟷ COMPONENT

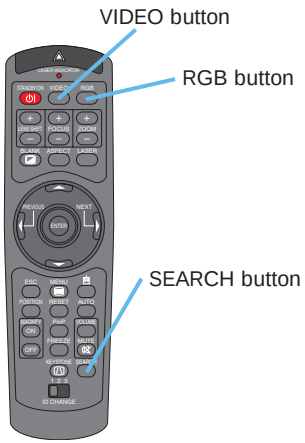


■ Using SEARCH button

Press the SEARCH button of the projector or the remote control.
Pressing the button automatically cycles through input ports and displays the picture of retrieved signal.

memo If no signal is found or the projector is unstable to find an input signal at any of its ports, it will turn to the state it was in prior to the search.

M1-D → RGB → BNC
↑ ↓
VIDEO ← S-VIDEO ← COMPONENT



■ Using RGB button

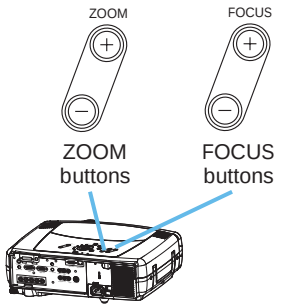
Press the RGB button of the remote control.
Pressing the button toggles between the RGB ports as shown below Select the signal you wish to project.

M1-D → RGB → BNC
↑ ↓

■ Using VIDEO button

Press the VIDEO button of the remote control.
Pressing the button toggles between the VIDEO ports as shown below Select the signal you wish to project.

COMPONENT → S-VIDEO → VIDEO
↑ ↓



2 Use the ZOOM buttons to adjust the screen size.

3 Use the FOCUS buttons to adjust the focus.

Selecting The Aspect Ratio

1 Press the Aspect button to toggle between the modes for aspect ratio.

■ **At a M1-D signal**

NORMAL ⟷ 4:3 ⟷ 16:9

memo NORMAL keeps the original aspect ratio of the input signal.

■ **At a RGB signal (not M1-D)**

4:3 ⟷ 16:9

■ **At a video signal**

4:3 ⟷ 16:9 ⟷ SMALL

memo At a HDTV signal of 1125i or 750p, only 16:9 can be selected.

Using The Automatic Adjustment Feature

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

1 Press the AUTO button.

■ **At a RGB signal**

The Vertical position (V POSITION), the horizontal position (H POSITION), the clock phase (H PHASE) and horizontal size (H SIZE) will be automatically adjusted.

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

■ **At a video signal**

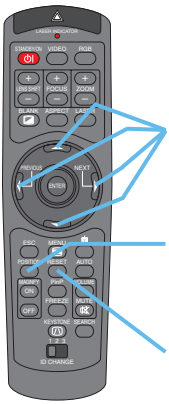
The signal type mode best suited for the respective input signal will be selected automatically.

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

Adjusting The Picture Position

memo This function is available only for RGB signals.

1 Press the POSITION button. As illustrated on the right, a dialog will appear on the screen to aid you in adjusting the position.



2 Use the cursor buttons ▲/▼/◀/▶ to adjust the position.

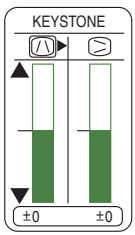
memo When you want to initialize the position, press the RESET button during adjustment.

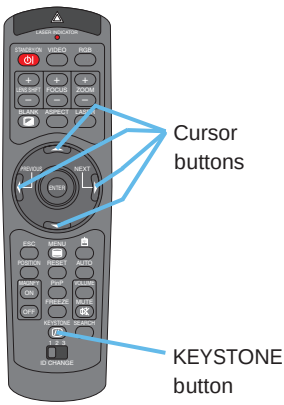
3 Press the POSITION button again to close the dialog and complete this operation.

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

Correcting The Keystone Distortion

1 Press the KEYSTONE button. As illustrated on the right, a dialog will appear on the screen to aid you in correcting the keystone distortion.





2 Use the cursor buttons ◀/▶ to select the direction of distortion to correct (⏢ or ⏥).

3 Use the cursor buttons ▲/▼ to correct the distortion.

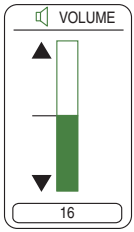
4 Press the KEYSTONE button again to close the dialog and complete this operation.

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

memo When this adjustment is excessive, certain degradation may appear on the picture. Also, please note that it may not function correctly with some input.

Adjusting The Volume

1 Press the VOLUME button.
As illustrated on the right, a dialog will appear on the screen to aid you in adjusting the volume.



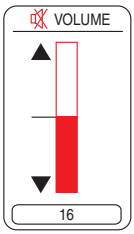
2 Use the cursor buttons ▲/▼ to adjust the volume.

3 Press the VOLUME button again to close the dialog and complete this operation.

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

Muting The Sound

1 Press the MUTE button.
As illustrated on the right, a dialog will appear on the screen indicating that you have muted the sound.



2 Press the MUTE or VOLUME button to restore the sound.

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

Temporarily Blanking The Screen

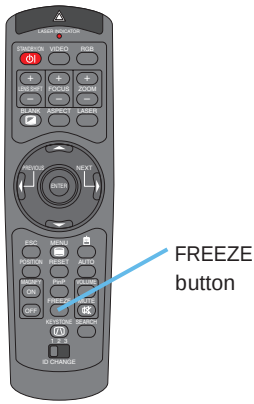
1 Press the BLANK button.
The input signal screen will shut off, and a BLANK screen will appear.

memo You can set the BLANK screen using the menu. Please refer to the item “BLANK” of the table of the section “SCREEN Menu”.

2 Press the BLANK button again to remove the blank screen, and return to the input signal screen.

Freezing The Screen

1 Press the FREEZE button.
As illustrated on the right, a dialog will appear on the screen, and the screen will freeze at the current image.



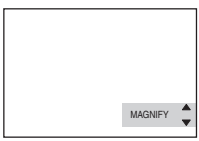
2 Press the FREEZE button again to restore the screen to normal.
The icon "II" will change to the icon "▶". And after a couple of seconds, the dialog will be closed and the screen will be restored to normal.

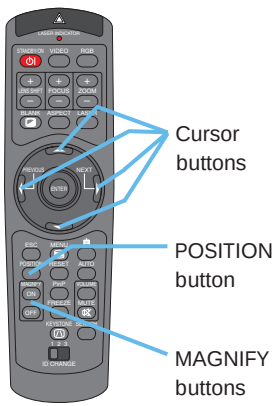
memo The freezing feature will automatically finish if a remote control's button that changes some display state (ex. blanking the screen, displaying a dialog or a menu, adjusting the picture, changing the input signal) is pressed, or a button of projector is pressed.

NOTE • If the projector continues projecting the same image for a long time (i.e. you forget to exit FREEZE mode), the image might possibly remain as an afterimage. Do not leave the projector in FREEZE mode for too long.

Using The Magunify Feature

1 Press the MAGNIFY (ON) button.
As illustrated on the right, a dialog will appear on the screen to aid you in magnifying the picture.





2 Press the POSITION button, then use the cursor buttons ▲/▼/◀/▶ to select the area to zoom.

3 Press the POSITION button again to finalize the zoom area.

4 Use the cursor buttons ▲/▼ to adjust the zoom level.

5 Press the MAGNIFY (OFF) button again to close the dialog and complete this operation.

memo The magnify feature will automatically finish if the automatic adjustment is execute, or the aspect, the signal type mode of video or the signal input state is changed.

Displaying The Child Window

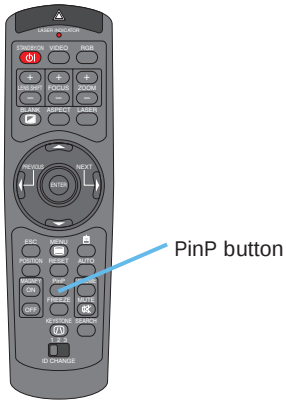
memo This feature called "PinP (Picture in Picture)" is available only when a RGB signal is selected to main screen.

1 Press the PinP button.
The child window with a picture of a video signal will appear.

2 Press the PinP button again to change the size of the child window or close the window.

Small child window → Large child window
↑ ↓
No child window

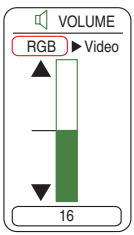
memo You can select the video signal to display in the child window, and the position of the child window. Please refer to the items “P.INP. INPUT” and “P.INP. POSIT.” of the table of the section “INPUT Menu”.



Selecting An Audio Input

memo This feature is available only when the child window is on the screen.

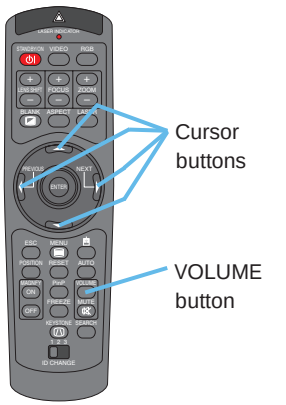
1 When the child window is on the screen, press the VOLUME button. As illustrated on the right, a dialog will appear on the screen.



2 Use the cursor buttons ◀/▶ to select an audio input.

RGB (Audio input for the main screen)
↕
Video (Audio input for the child window)

memo You also can adjust the volume using the cursor buttons ◀/▶. Please refer to the section “Adjusting The Volume”.



3 Press the VOLUME button again to close the dialog and complete this operation.

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

Multifunctional Settings

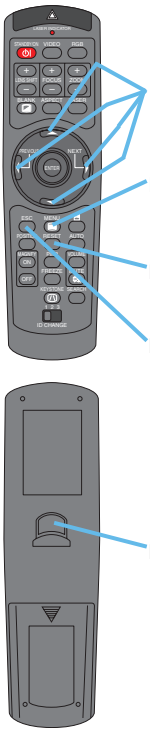
Using The Menu Functions

This projector has the following menus: MAIN, PICTURE-1, PICTURE-2, INPUT, AUTO, SCREEN, OPTION and NETWORK. Each of these menus is operated using the same methods. The basic operations of these menus are as follows.

1 Press the MENU button. The menu will appear on the screen.

2 Use the cursor buttons ▲/▼ to select a menu, then press the ▶ (or the ENTER) button to progress.
The display of the selected menu will appear.

3 Use the cursor buttons ▲/▼ to select an item, then press the ▶ (or the ENTER) button to progress.
The operation display of the selected item will appear.



4 Use the cursor buttons ▲/▼ to operate the item.

memo When you want to reset the adjustment, press the RESET button during the operation. Note that the items whose functions are performed simultaneously with operating (ex. LANGUAGE, WHISPER, H PHASE etc.) are not reset.

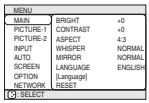
memo When you want to return to the previous display, press the ◀ or ESC button.

5 Press the MENU button again to close the menu display and complete this operation.

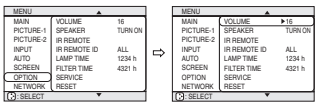
memo Even if you don't do anything, the menu will automatically disappear after a few seconds

ex. Turning off the built-in speaker

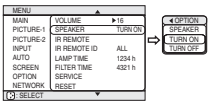
1) Press the MENU button.



2) Select the "OPTION" using the ▼ button, then press the ▶ button.



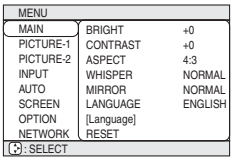
3) Select the "SPEAKER" using the ▼ button, then press the ▶ button.



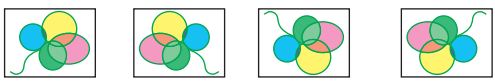
4) Use the cursor button ▼ to select the "TURN OFF".

5) Press the MENU button.

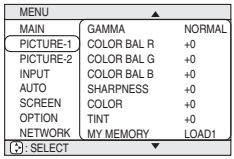
MAIN Menu



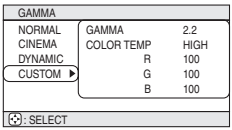
With the MAIN menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.

Item	Description
BRIGHT	Adjust the brightness using the ▲ / ▼ buttons. : Light ⇔ Dark
CONTRAST	Adjust the contrast using the ▲ / ▼ buttons. : Strong ⇔ Weak
ASPECT	Select an aspect ratio using the ▲ / ▼ buttons. : ■ At a M1-D signal NORMAL ⇔ 4:3 ⇔ 16:9 The NORMAL keeps the original aspect ratio of the input signal. ■ At a RGB signal (not M1-D) 4:3 ⇔ 16:9 ■ At a video signal 4:3 ⇔ 16:9 ⇔ SMALL ***memo*** At a HDTV signal of 1125i or 750p, only the 16:9 can be selected.
WHISPER	Select the NORMAL or the WHISPER using the ▲ / ▼ buttons. : NORMAL ⇔ WHISPER When the WHISPER is selected, acoustic noise and screen brightness are reduced.
MIRROR	Select a mirror status using the ▲ / ▼ buttons. : NORMAL ⇔ H:INVERT ⇔ V:INVERT ⇔ H&V:INVERT ex. 
LANGUAGE	Select a menu language using the ▲ / ▼ buttons. : ENGLISH ⇔ FRANÇAIS ⇔ DEUTSCH ⇔ ESPAÑOL ⇔ ITALIANO NORSK ⇔ NEDERLANDS ⇔ 日本語 ⇔ PORTUGUÊS ⇔ 中文 한글 ⇔ SVENSKA ⇔ РУССКИЙ ⇔ SUOMI ⇔ POLSKI
RESET	Select the EXECUTE using the ▲ button to reset the MAIN menu items. : EXECUTE ⇦ CANCEL The items of the MAIN menu are collectively returned to the initial setting. Note that the items “WHISPER” and “LANGUAGE” are not reset.

PICTURE-1 Menu



With the PICTURE-1 menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.

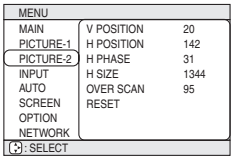
<table>
<tr><th>Item</th><th colspan="2">Description</th></tr>
<tr><td rowspan="6">GAMMA</td><td colspan="2">Select a gamma mode using the ▲ / ▼ buttons. :
NORMAL ⇔ CINEMA ⇔ DYNAMIC ⇔ CUSTOM
Selecting the CUSTOM and then pressing the ▶ (or the ENTER) button calls the CUSTOM menu.
<u>CUSTOM Menu</u>
Select an item using the ▲ / ▼ buttons, and press the ▶ (or the ENTER) button to perform each function.
GAMMA ⇔ COLOR TEMP ⇔ R ⇔ G ⇔ B
memo The R, G and B can be selected only when the USER is selected under the COLOR TEMP.
</td></tr>
<tr><td>GAMMA</td><td>Adjust the gamma data using the ▲ / ▼ buttons. :
Up ⇔ Down</td></tr>
<tr><td>COLOR TEMP</td><td>Select a color temperature using the ▲ / ▼ buttons. :
HIGH ⇔ MIDDLE ⇔ LOW ⇔ USER</td></tr>
<tr><td>R</td><td>Adjust the red color level for the USER mode of the COLOR TEMP using the ▲ / ▼ buttons. : Strong ⇔ Weak</td></tr>
<tr><td>G</td><td>Adjust the green color level for the USER mode of the COLOR TEMP using the ▲ / ▼ buttons. : Strong ⇔ Weak</td></tr>
<tr><td>B</td><td>Adjust the blue color level for the USER mode of the COLOR TEMP using the ▲ / ▼ buttons. : Strong ⇔ Weak</td></tr>
<tr><td>COLOR BAL R</td><td colspan="2">Adjust the red color balance using the ▲ / ▼ buttons. :
Strong ⇔ Weak</td></tr>
<tr><td>COLOR BAL G</td><td colspan="2">Adjust the green color balance using the ▲ / ▼ buttons. :
Strong ⇔ Weak</td></tr>
<tr><td>COLOR BAL B</td><td colspan="2">Adjust the blue color balance using the ▲ / ▼ buttons. :
Strong ⇔ Weak</td></tr>
<tr><td>SHARPNESS</td><td colspan="2">Adjust the sharpness using the ▲ / ▼ buttons. :
Clear ⇔ Soft
memo This item can be selected only at a video signal.</td></tr>
<tr><td>COLOR</td><td colspan="2">Adjust the whole color using the ▲ / ▼ buttons. :
Strong ⇔ Weak
memo This item can be selected only at a video signal.</td></tr>
<tr><td>TINT</td><td colspan="2">Adjust the tint using the ▲ / ▼ buttons. :
Green ⇔ Red
memo This item can be selected only at a video signal.</td></tr>
</table>

(This table is continued to the following page.)

PICTURE-1 Menu (continued)

Item	Description
MY MEMORY	Select a command to load or save using the ▲ / ▼ buttons, and then press the ▶ (or the ENTER) button to perform the function.: LOAD1 ⇔ LOAD2 ⇔ LOAD3 ⇔ LOAD4 SAVE1 ⇔ SAVE2 ⇔ SAVE3 ⇔ SAVE4 This projector has 4 numbered memories for adjustment data. Performing the SAVE1, SAVE2, SAVE3 or SAVE4 puts the current adjustment data on the memory whose number corresponds with the command's number. 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.
RESET	Select the EXECUTE using the ▲ button to reset the PICTURE-1 menu items. : EXECUTE ⇦ CANCEL The items of the PICTURE-1 menu are collectively returned to the initial setting. Note that the items "MY MEMORY" and "GAMMA" of the CUSTOM menu under the item "GAMMA" are not reset.

PICTURE-2 Menu

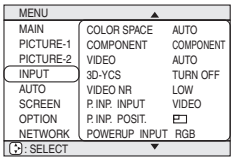


With the PICTURE-2 menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.

memo This menu cannot be selected at a M1-D signal.

Item	Description
V POSITION	Adjust the vertical position using the ▲ / ▼ buttons. : Up ⇔ Down ***memo*** This item can be selected only at a RGB signal.
H POSITION	Adjust the horizontal position using the ▲ / ▼ buttons. : Left ⇔ Right ***memo*** This item can be selected only at a RGB signal.
V POSITION	Adjust the horizontal phase to eliminate flicker using the ▲ / ▼ buttons. : Right ⇔ Left ***memo*** This item can be selected only at a RGB signal or a component video signal other than a COMPONENT port input of 525i/625i/SCART RGB.
H SIZE	Adjust the horizontal size using the ▲ / ▼ buttons. : Large ⇔ Small ***memo*** This item can be selected only at a RGB signal. ***memo*** 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.
OVER SCAN	Adjust the over-scan ratio using the ▲ / ▼ buttons. : Small ⇔ Large ***memo*** This item can be selected only at a video signal. ***memo*** When this adjustment is too large, certain degradation may appear at the frame area of the picture. In such a case, please adjust small.
RESET	Select the EXECUTE using the ▲ button to reset the PICTURE-2 menu items. : EXECUTE ⇦ CANCEL The items of the PICTURE-2 menu are collectively returned to the initial setting. Note that the item “H PHASE” is not reset.

INPUT Menu



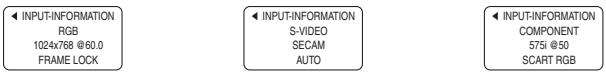
With the INPUT menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.

Item	Description
COLOR SPACE	Select a color space mode using the ▲ / ▼ buttons. : AUTO ⇔ RGB ⇔ SMPTE240 ⇔ REC709 ⇔ REC601 Selecting the AUTO automatically selects the optimum mode. ***memo*** This item can be selected only at a RGB signal or a component video signal other than a COMPONENT port input of 525i/625i/SCART RGB. ***memo*** The AUTO operation may not work well at some signals. In such a case, select the SMPTE240 or the REC709 for a HDTV signal.
COMPONENT	Select a function of COMPONENT port using the ▲ / ▼ buttons. : COMPONENT ⇔ SCART RGB When the SCART RGB is selected, the COMPONENT port function as a port for a SCART RGB signal input. Please refer to the section “Connecting Your Devices”.
VIDEO	Select a signal type mode using the ▲ / ▼ buttons. : AUTO ⇔ NTSC ⇔ PAL ⇔ SECAM ⇔ NTSC4.43 ⇔ M-PAL ⇔ N-PAL Selecting the AUTO automatically selects the optimum mode. ***memo*** This item is 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. ***memo*** The AUTO operation may not work well at some signals. If the picture becomes unstable (ex. a irregular picture, a color lack), please select the mode depending on the input signal.
3D-YCS	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF When the TURN ON is selected, the 3D-YCS mode works for a completely still image, or images with few motions. ***memo*** This item performs only at a video signal of NTSC3.58. ***memo*** When this function performs, the setting of the item “VIDEO NR” of this INPUT menu is not effective.
VIDEO NR	Select a noise reduction level using the ▲ / ▼ buttons. : HIGH ⇔ MIDDLE ⇔ LOW The noise on screen is reduced according to the selected level. ***memo*** This item performs only at a video signal from the VIDEO port or the S-VIDEO port. At a video signal of NTSC3.58, this function performs only when the TURN OFF is selected to the item “3D-YSC” of this INPUT menu. ***memo*** When this adjustment is excessive, certain degradation may appear on the picture.

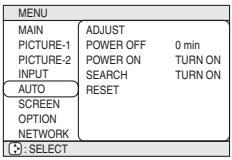
(This table is continued to the following page.)

Multifunctional Settings (continued)

INPUT Menu (continued)

Item	Description
P.IN P. INPUT	Select a signal input port for the child window using the ▲ / ▼ buttons. : VIDEO ⇔ S-VIDEO ***memo*** About the child window, please refer to the section “Displaying the Child Window”.
P.IN P. POSIT.	Select the display position of the child window using the ▲ / ▼ buttons. : ***memo*** About the child window, please refer to the section “Displaying the Child Window”.
POWERUP INPUT	Select a signal input port to display just when the projector is turned on, using the ▲ / ▼ buttons. : LAST INPUT ⇔ M1-D ⇔ RGB ⇔ BNC ⇔ COMPONENT ⇔ S-VIDEO ⇔ VIDEO Selecting the LAST INPUT selects the port that was used at the last time.
INFORMATION	Pressing the ▶ (or the ENTER) button displays the INPUT INFORMATION menu. The INPUT INFORMATION menu shows the information about the current signal input as illustrated below.  ***memo*** The “FRAME LOCK” message means the frame lock function is working. This function automatically works when a RGB signal with vertical frequency of 50 to 60 is input, and it displays a moving picture more smoothly. ***memo*** The “SCART RGB” message means the COMPONENT port is working as a SCART RGB port. Please refer to the item “COMPONENT” in this table.
S2-ASPECT	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF When the TURN ON is selected, an S2-video signal can be identified and the optimum aspect ratio is automatically selected. ***memo*** This item is performs only at a S-VIDEO signal. ***memo*** When the ASPECT button is used or the item “ASPECT” of the MAIN menu is operated, the TURN OFF will be automatically selected to this item.
RESET	Select the EXECUTE using the ▲ button to reset the INPUT menu items. : EXECUTE ⇦ CANCEL The items of the INPUT menu are collectively returned to the initial setting. Note that the item “INFORMATION” is not reset.

AUTO Menu



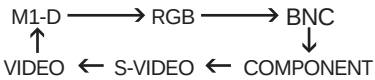
With the AUTO menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.

Item	Description
ADJUST	Pressing the ▶ (or the ENTER) button performs the automatic adjustment. ■ At a RGB signal The vertical position (V POSITION), the horizontal position (H POSITION), the clock phase (H PHASE) and the horizontal size (H SIZE) will be automatically adjusted. ***memo*** Make sure that the application window is set to its maximum size prior to attempting to use this feature. Dark pictures may still be incorrectly adjusted. Use a bright screen when adjusting. ■ At a video signal The signal type mode best suited for the respective input signal will be selected automatically. ***memo*** This function is available only when the AUTO is selected to the item "VIDEO" of the INPUT menu. For a component video signal, the signal type is identified automatically independently of this function. ***memo*** This operation requires approximately 10 seconds, and the message "AUTO IN PROGRESS" is displayed during the operation. ***memo*** This operation may not work well at some signals. If the picture becomes unstable (ex. a irregular picture, a color lack), please select the suitable mode to the item "VIDEO" of the INPUT menu.
POWER OFF	Set the time using the ▲ / ▼ buttons. : Long (max. 99 minutes) ⇔ Short (min. 0 minute = DISABLE) ex. When the time is set to 1 to 99, the projector lamp will go off and the STANDBY/ON indicator begins blinking when the passed time with a proper signal (without no-signal and an unsuitable signal) reaches at the set time. Please refer to the section "Turning Off The Power".
POWER ON	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons.: TURN ON ⇔ TURN OFF When the TURN ON is selected, you can turn the projector on without pressing the STANDBY/ON button. Please refer to the section "Turning Off The Power".

(This table is continued to the following page.)

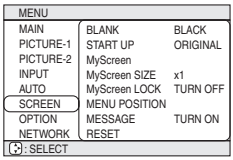
Multifunctional Settings (continued)

AUTO Menu (continued)

Item	Description
SEARCH	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF When the TURN ON is selected, detecting no signal cycles through input ports and displays the picture of retrieved signal.  ***memo*** When the TURN ON is selected, pressing the RGB button selects the M1-D ports, and pressing the VIDEO button selects the COMPONENT port. ***memo*** If no signal is found or the projector is unstable to find an input signal at any of its ports, it will return to the state it was in prior to the search.
RESET	Select the EXECUTE using the ▲ button to reset the AUTO menu items. : EXECUTE ⇦ CANCEL The items of the AUTO menu are collectively returned to the initial setting. Note that the item “ADJUST” is not reset.

SCREEN Menu

With the SCREEN menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.



Item	Description
BLANK	Select a type of the BLANK screen using the ▲ / ▼ buttons. : MyScreen ⇔ ORIGINAL ⇔ BLUE ⇔ WHITE ⇔ BLACK The BLANK screen is the screen, which is displayed by pressing the BLANK button. The MyScreen is the screen you can register a desired screen, and the ORIGINAL is the existing standard screen. The BLUE, the WHITE and the BLACK are the non-pattered (plain) screens in each color. ***memo*** To avoid remaining as an afterimage, the MyScreen and the ORIGINAL screens will change to the BLACK screen after several minutes. ***memo*** For the MyScreen, please refer to the item “MyScreen” in this table.
START UP	Select a type of the START UP screen using the ▲ / ▼ buttons. : MyScreen ⇔ ORIGINAL ⇔ TURN OFF The START UP screen is the screen, which is displayed by detecting no signal or an unsuitable signal. The MyScreen is the screen you can register a desired screen, and the ORIGINAL is the existing standard screen. When the TURN OFF is selected, the BLUE is used. ***memo*** To avoid remaining as an afterimage, the MyScreen and the ORIGINAL screens will change to the BLANK after several minutes. If also the BLANK screen is the MyScreen or the ORIGINAL, it will change to the BLACK screen. ***memo*** About the MyScreen, please refer to the item “MyScreen” in this table. About the BLUE, BLACK and BLANK screens, please refer to the item “BLANK” in this table.
MyScreen	Pressing the ▶ (or the ENTER) button starts the MyScreen registration. Please see the flow chart on the following page.
MyScreen SIZE	Select the size of the MyScreen using the ▲ / ▼ buttons. : x1 ⇔ FULL
MyScreen LOCK	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons.: TURN ON ⇔ TURN OFF The TURN ON disables the operation of the item “MyScreen” of this SCREEN menu.
MENU POSITION	After pressing the ▶ (or ENTER) button, adjust the menu position using the ▲ / ▼ / ◀ / ▶ buttons.: Up ⇧ Left ⇦ + ⇨ Right ⇩ Down ***memo*** To finish this operation, press the ESC button but not the ◀ button.

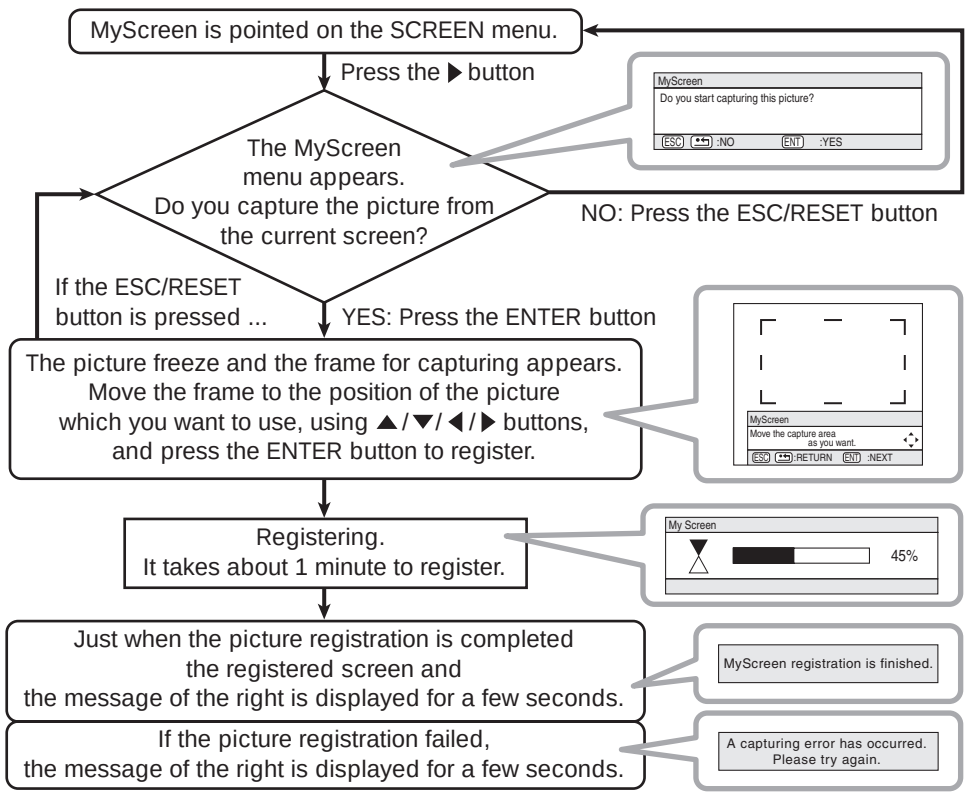
(This table is continued to the following page.)

Multifunctional Settings (continued)

SCREEN Menu (continued)

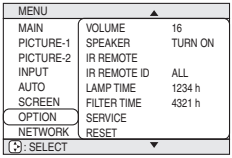
Item	Description
MESSAGE	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF When the TURN ON is selected, the following message function works. The message of the “AUTO IN PROGRESS” for the auto adjustment. The message of the ”NO INPUT IS DETECTED” The message of the ”SYNC IS OUT OF RANGE” The message of the ”Searching …” The message of the “Detecting …” The indication of the input signal by input change. The indication of the aspect ratio by changing the aspect ratio. The indication of “FOCUS” by adjusting the focus.
RESET	Select the EXECUTE using the ▲ button to reset the SCREEN menu items. : EXECUTE ⇦ CANCEL The items of the SCREEN menu are collectively returned to the initial setting.

How to register your picture as the MyScreen



OPTION Menu

With the OPTION menu, the items shown in the table below can be performed. Perform each operation in accordance with the instructions in the table below.

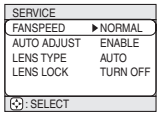


Item	Description
VOLUME	Adjust the volume using the ▲ / ▼ buttons. : High ⇔ Low
SPEAKER	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF When the TURN ON is selected, the built-in speaker works.
IR REMOTE	Select a remote sensor using the ▲ / ▼ button (1), then switch it using the ENTER button (2). : (1) FRONT ⇔ TOP ⇔ REAR (2) ☐ (Off) ⇔ ☑ (On) ***memo*** A sensor cannot be turned off when the other two are off. Always at least one sensor is on.
IR REMOTE ID	Select a number as an ID number for remote control using the ▲ / ▼ buttons. : ALL ⇔ 1 ⇔ 2 ⇔ 3 The projector is controlled by the remote control whose ID CHANGE switch is set into the position of the same number as this number. When the ALL is selected, the projector is controlled by a remote control irrespective of the position of the ID CHANGE switch. ***memo*** Please refer to the section “Using The Remote ID Feature”.
LAMP TIME	Pressing the RESET button for about 3 seconds displays the LAMP TIME menu. Select the RESET using ▲ button to reset the timer. : RESET ⇦ CANCEL Selecting the RESET resets the count of the lamp timer to 0. ***memo*** Perform this function only when you have replaced the lamp. The lamp timer counts the used time of the current lamp, to display the messages about the lamp. Incorrect performing causes incorrect operation of the messages. ***memo*** About replacing the lamp, please refer to the section” Lamp”.
FILTER TIME	Pressing the RESET button for about 3 seconds displays the FILTER TIME menu. Select the RESET using ▲ button to reset the timer. : RESET ⇦ CANCEL Selecting the RESET resets the count of the lamp timer to 0. ***memo*** Perform this function only when you have cleaned or replaced the air filter. The filter timer counts the used time of the air filter after cleaning or replacement, to display the messages about the air filter. Incorrect performing causes incorrect operation of the messages. ***memo*** About caring for the air filter, please refer to the section “Air Filter”.

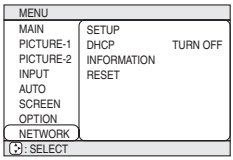
(This table is continued to the following page.)

Multifunctional Settings (continued)

OPTION Menu (continued)

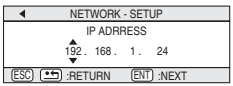
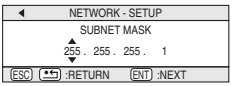
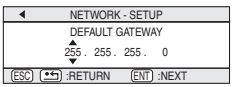
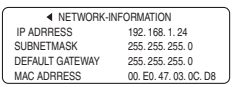
Item	Description	
SERVICE	Pressing the ▶ (or the ENTER) button calls the SERVICE menu. **SERVICE Menu** Select an item using the ▲ / ▼ buttons, and press the ▶ (or the ENTER) button to per form each function. : FANSPEED ⇔ AUTO ADJUST ⇔ LENS TYPE ⇔ LENS LOCK 	
	FANSPEED	Select the fan speed level using the ▲ / ▼ buttons. : HIGH ⇔ NORMAL The HIGH ups rotation speeds of fans, though. Please use this function in using a projector at highlands etc. ***memo*** Note that the projector is noisier when the HIGH is selected.
	AUTO ADJUST	Select the ENABLE or the DISABLE using the ▲ / ▼ buttons. : ENABLE ⇔ DISABLE When you want to keep the current adjustment state, select the DISABLE. When the ENABLE is selected, detecting a signal change to a RGB signal performs the automatic adjustment of the vertical position (V POSITION), the horizontal position (H POSITION), the clock phase (H PHASE) and the horizontal size (H SIZE).
	LENS TYPE	Select the lens type currently used using the ▲ / ▼ buttons. : AUTO ⇔ 1 ⇔ 2 ⇔ 3 ⇔ 4 ⇔ 5 Please select depending on the following. AUTO: automatically selects optimum mode. 1: for a standard lens (Type NL-500 etc.) 2: for a fixed short throw lens (Type FL-501 etc.) 3: for a short throw lens (Type SL-502 etc.) 4: for a long throw lens (Type LL-503 etc.) 5: for a super long throw lens (Type LL-504 etc.) ***memo*** This setting has an influence on the keystone distortion etc. ***memo*** About the optional lens, ask your dealer.
	LENS LOCK	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF Selecting the TURN ON locks the adjustment of the lens shift, the zoom and the focus.
RESET	Select the EXECUTE using the ▲ button to reset the OPTION menu items. : EXECUTE ⇦ CANCEL The items of the OPTION menu are collectively returned to the initial setting. Note that the items “VOLUME”, “LAMP TIME” and “FILTER TIME” are not reset.	

NETWORK Menu



This projector provides the NETWORK function. If you use this function, please set up the projector according to the Network environment in which you use it.

memo When you use a Network suitable to the DHCP function, the following operation is not required commonly, because the TURN ON is selected to the item “DHCP” at the shipment time. Please see the section “Network Setting Up”.

Item	Description
SETUP	Pressing the ▶ (or the ENTER) button calls the IP ADDRESS menu. ***memo*** This item performs only when the TURN OFF is set to the item “DHCP” of this NETWORK menu. The IP Address is identification number of the projector on the Network.  1. Set the IP Address using the ▲ / ▼ buttons. ***memo*** The same number as the IP Address of other units cannot be used. Pressing the ▶ (or the ENTER) button at the IP ADDRESS menu calls the SUBNET MASK menu. The SUBNET MASK is an address of the Network.  2. Set the same number as the address of the Network to be used. Pressing the ▶ (or the ENTER) button at the SUBNET MASK menu calls the DEFAULT GATEWAY menu. The DEFAULT GATEWAY is the address of the main device.  3. Set the same number as the address of the device as gateway to an outer Network.
DHCP	Select the TURN ON or the TURN OFF using the ▲ / ▼ buttons. : TURN ON ⇔ TURN OFF When you use a Network unsuitable to the DHCP function, select the TURN OFF.
INFORMATION	Pressing the ▶ (or the ENTER) button displays the INFORMATION menu. The INFORMATION menu shows the information about the current Network setting as illustrated below. 
RESET	Select the EXECUTE using the ▲ button to reset the NETWORK menu items. : EXECUTE ⇦ CANCEL The items of the NETWORK menu are collectively returned to the initial setting.

Network Setting Up

This projector provides the NETWORK function. If you use this function, please consult your dealer for information.

To start, connect the NETWORK port to a gateway device via a RJ-45 (10BASE-1) cable, then set up the projector according to the Network environment in which you use it.

When you use a Network unsuitable to the DHCP function

Please set the IP Address, the Subnet Mask, the Gateway and the DHCP (on/off) using the NETWORK menu, referring to the section “NETWORK Menu”.

When you use a Network suitable to the DHCP function or has been set up

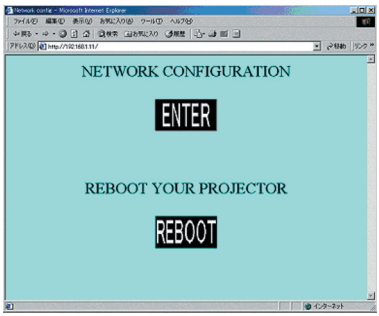
You can set the IP Address, the Subnet Mask, the Gateway and the DHCP (on/off) using a Web Browser of the computer connected to the Network. Although it needs a Web Browser of Internet Explorer 4.0 or higher.

Input the same IP address as set to the projector, to the Web Browser of the computer connected to LAN.

ex. Case of IP Address = 192.168.1.11

1) Input “http://192.168.1.11”.

2) Click “ENTER”.

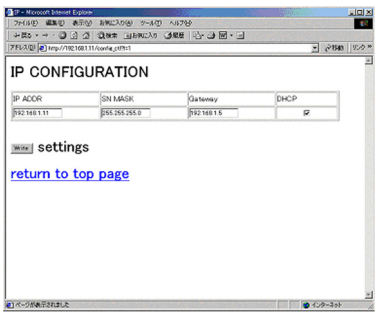


3) Input the required data according to the screen.

4) Make sure of the input data, then click "Write".

memo These setting will be active after reboot. These setting will be stored, and used when DHCP is OFF.

5) Click “Return to top page”.



6) Click “REBOOT” to complete this operation.

Lamp

⚠ WARNING

HIGH VOLTAGE

HIGH TEMPERATURE

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 USA)
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, make sure the power switch is off and the power cable is not plugged in, 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.

- 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 **456-8935**.
- 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.

Replacing The Lamp

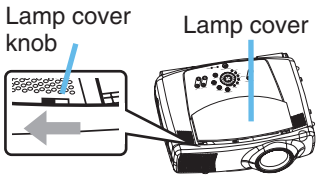
If the indicators or a message prompts you to replace the lamp, replace the lamp as soon as possible.

1 Turn off the projector, and unplug the power cord. Allow the lamp bulb to cool for at least 45 minutes.

2 Contact your dealer to prepare a new lamp. Tell the dealer your lamp type number. If the projector is mounted on the ceiling, or if the lamp has broken, also ask the dealer to replace the lamp.

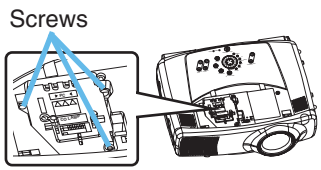
In the case of replacement by yourself,

3 After making sure that the projector has cooled adequately, slide the knob of a lamp cover lock as shown in the Figure. Then, one side of the lamp cover is raised. Pull up the lamp cover and remove it, as shown in the Figure.

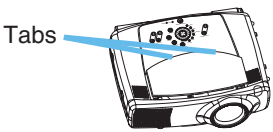


4 Unscrew the 3 screws, and slowly pull out the lamp by the handle. Be careful not to touch the inside of the lamp case.

5 Insert the new lamp, and tighten the 3 screws firmly to lock it in place.



6 Interlocking the 2 tabs of the lamp cover to the projector, put the lamp cover on the projector. Then push the point of the lamp cover to fix it, as shown in the Figure. Make sure that the lamp cover does't come up.



7 Turn on the projector, and reset the lamp timer.

(1) While the projector running, press the MENU button to open the menu.

(2) Choose the "OPTION" on the menu using the ▲ / ▼ button, then press the ▶ button or ENTER button.

(3) Choose the "LAMP TIME" using the ▲ / ▼ button, then press and hold the RESET button for 3 seconds.

(4) Choose the "RESET" using the ▲ button.

memo 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.

memo Incorrectly resetting of the lamp timer (resetting without replacement, or neglect of resetting after replacement) will result in incorrect message functions.

Air Filter

⚠ **WARNING** • Please carefully read the “User’s Manual - Safety Guide.
• Before caring, make sure the power switch is off and the power cable is not plugged in, then wait at least 45 minutes for the lamp to cool sufficiently.
• Use only the air filter of the specified type **NJ08081**.
• Do not use the projector with the air filter and filter cover removed. The use without the air filter could result in damage.
⚠ **CAUTION** • If the air filter becomes clogged by dust or the like, internal temperature rises and could cause malfunction. The power is automatically turned off in order to prevent the projector from overheating internally.

Caring For The Air Filter

The air filter should be cleaned about every 100 hours. If the indicators or a message prompts you to clean the air filter, clean the air filter as soon as possible.
If the soiling will not come off the air filter, or it becomes damaged, then it needs to be replaced. Please replace the air filter as soon as possible.

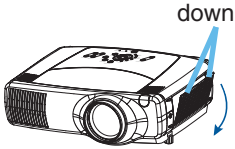
memo When you replace the lamp, please replace also the air filter.

1 Turn off the projector, and unplug the power cord. Allow the lamp bulb to cool for at least 45 minutes.

2 After making sure that the projector has cooled adequately, remove the filter cover and air filter.

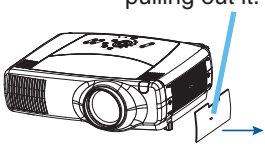
3 Apply a vacuum cleaner to the top of the filter cover and the air filter to clean.
If the soiling will not come off the air filter, or it becomes damaged, it needs to be replaced.
If the air filter needs to be replaced, contact your dealer to prepare a new air filter. Tell the dealer your air filter type.

Hold the release buttons of the filter cover while pulling down it.



4 Insert the cleaned air filter or a new air filter, and replace the filter cover.

Hold the release button of the air filter while pulling out it.



5 Turn on the projector power, and reset the filter timer.
(1) While the projector running, press the MENU button to open the menu.
(2) Choose the “OPTION” on the menu using the ▲ / ▼ button, then press the ▶ button or ENTER button.
(3) Choose the “FILTER TIME” using the ▲ / ▼ button, then press and hold the RESET button for 3 seconds.
(4) Choose the “RESET” using the ▲ button.

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

Other Care

⚠ **WARNING** • Please carefully read the “User’s Manual - Safety Guide”.
• Before caring, make sure the power switch is off and the power cable is not plugged in.
• Be cautious of high temperature. Do not touch about the lens and ventilation openings during use or immediately after use prevent a burn.
• Never try to care for the inside of the unit yourself. Doing so is dangerous.

⚠ **CAUTION** • Incorrect care could have adverse influence such as discoloration, peeling paint, etc.
• Do not use cleaner or chemicals other than those listed below, including benzene and paint thinner.
• Do not use aerosols or sprays.
• Do not polish or wipe with hard objects.

Caring For The Inside Of The Projector

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

Caring For The Lens

1 Turn off the projector, and unplug the power cord.

2 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

1 Turn off the projector, and unplug the power cord.

2 Wipe lightly with gauze or a soft cloth.

memo 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.

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

Message	Description
☼ CHANGE THE LAMP AFTER REPLACING LAMP, RESET THE LAMP TIMER.	**The time the lamp timer has counted is approaching 2000 hours.** Preparation of a new lamp, and an early lamp change is recommended. After you have change the lamp, please be sure to reset the lamp timer.
☼ CHANGE THE LAMP AFTER REPLACING LAMP, RESET THE LAMP TIMER. THE POWER WILL TURN OFF AFTER ** hr.	**The time the lamp timer has counted is approaching 2000 hours, so a lamp change within ** hours is recommended.** When lamp usage reaches 2000 hours, the power will automatically be turned off. Please change the lamp by referring to the section “Lamp”. After you have changed the lamp, please be sure to reset the lamp timer.
☼ CHANGE THE LAMP AFTER REPLACING LAMP, RESET THE LAMP TIMER. THE POWER WILL TURN OFF AFTER 0 hr.	**As the time the lamp timer has counted has reached 2000 hours, the power will soon be automatically turned off.** Please immediately turn the power off, and change the lamp by referring to the section “Lamp”. After changing the lamp, please be sure to reset the lamp timer.

(This table is continued to the following page.)

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. This projector is equipped with an automatic shut-down function, such that the power will automatically be turned off when lamp usage time has reached 2000 hours. Please be aware, however, that among lamp types, there are major differences in product lifetimes; a lamp may thus fail to light even prior to the functioning of the automatic shut-down function of this projector.

Troubleshooting (continued)

Related Messages (continued)

Message	Description
CLEAN THE AIR FILTER POWER OFF FIRST, THEN CLEAN THE AIR FILTER. AFTER CLEANING THE AIR FILTER, RESET THE FILTER TIMER.	**The time the filter timer has counted has reached 100 hours.** Please clear or change the air filter by referring to the section “Air Filter”. After caring for the air filter, please be sure to reset the filter timer.
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 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?
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 fV *****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.

Regarding The Indicator Lamps

Lighting and flashing of the STANDBY/ON 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.

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 "○" (OFF) side of the main 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.

STANDBY/ON indicator	LAMP indicator	TEMP indicator	Description
Lighting in **Orange**	Turned **off**	Turned **off**	**The projector is in a standby state.** Please refer to the section "Power On/Off".
*Blinking in **Green***	Turned **off**	Turned **off**	**The projector is warming up.** Please wait.
Lighting in **Green**	Turned **off**	Turned **off**	**The projector is in an on state.** Ordinary operations may be performed.
*Blinking in **Orange***	Turned **off**	Turned **off**	**The projector is cooling down.** Please wait.
*Blinking in **Red***	(discretionary)	(discretionary)	**The projector is cooling down. A certain error has been detected.** Please wait until the STANDBY/ON indicator finishes blink, and then perform the proper response measure using the item descriptions below as reference.
Lighting in **Red**	Lighting in **Red**	Turned **off**	**The lamp does not light, and there is a possibility that 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 change the lamp by referring to the section "Lamp".

(This table is continued to the following page.)

Regarding The Indicator Lamps (continued)

STANDBY/ON indicator	LAMP indicator	TEMP indicator	Description
Lighting in **Red**	*Blinking in **Red***	Turned **off**	**Either there is no lamp and/or lamp cover, or 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. If the same indication is displayed after the treatment, please contact your dealer or service company.
Lighting in **Red**	Turned **off**	*Blinking in **Red***	**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.
Lighting in **Red**	Turned **off**	Lighting in **Red**	**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 change the lamp by referring to the section “Lamp”.
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 (0°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.

Troubleshooting (continued)

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.

Before requesting repair, please check in accordance with the following chart. If the situation cannot be corrected, please contact your dealer or service company.

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.

Phenomenon	Cases not involving a machine defect	Reference pages
Power does not come on.	**The electrical power cord is not plugged in.** Correctly connect the power cord.	11
	The power switch is not set to the on position. Set the power switch to [|] (On).	15
	The main power source has been interrupted during operation such as by a power outage (blackout), etc. Please turn the power off, and allow the unit to cool down at least 20 minutes. After the projector has sufficiently cooled down, please turn the power on again.	15
	Either there is no lamp and/or lamp cover, or 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.	35, 36
Neither sounds nor pictures are outputted.	**The signal cables are not correctly connected.** Correctly connect the connection cables.	8, 9
	Signal source does not correctly work. Correctly set up the signal source device by referring to the manual of the source device.	-
	The input changeover settings are mismatched. Select the input signal, and correct the settings.	16

(This table is continued to the following page.)

Troubleshooting (continued)

Phenomena That May Easily Be Mistaken For Machine Defects (continued)

Phenomenon	Cases not involving a machine defect	Reference pages
Pictures are displayed, but no sounds are heard.	**The signal cables are not correctly connected.** Correctly connect the connection cables.	8, 9
	The volume is adjusted to an extremely low level. Adjust the VOLUME to a higher level.	19, 32
	The sound is muted. Press the MUTE button to restore the sound.	19
	The audio input is not correctly selected when the child window is displayed. Correctly select the audio input.	22
Sounds are heard, but no pictures are displayed.	**The lens cap is attached.** Remove the lens cap.	4, 15
	The signal cables are not correctly connected. Correctly connect the connection cables.	8, 9
	The brightness is adjusted to an extremely low level. Adjust the BRIGHT to a higher level using the menu function.	23
	The screen is blanked. Press the BLANK button to return to the input signal screen.	19
Colors have a faded- out appearance, or Color tone is poor.	**Color settings are not correctly adjusted.** Perform picture adjustments by changing the COLOR BAL R, COLOR BAL G, COLOR BAL B, COLOR and/or TINT settings, using the menu functions.	24
Pictures appear dark.	**The brightness and/or contrast are adjusted to an extremely low level.** Adjust the BRIGHT and/or CONTRAST settings to a higher level using the menu function.	23
	The WHISPER function is working. Select the NORMAL to the item WHISPER in the MAIN menu.	23
	The lamp is approaching the end of its product lifetime. Replace the lamp.	35, 36
Pictures appear blurry.	**Either the focus and/or horizontal phase settings are not properly.** Adjust the focus using the focus buttons, and/or H PHASE using the menu function.	16
	The lens is dirty or misty. Clean the lens by referring to the section “Caring For The Lens”.	38
Input signal changes with no operation.	**The INPUT dial is set between the click points.** Turn the INPUT dial and set it at a click point.	16

Warranty And After-Service

If a problem occurs with the equipment, first refer to the “Troubleshooting” and run through the suggested checks. If this does not resolve the problem, please contact your dealer or 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 crystal panel	Panel size	2.5 cm (0.99 type)
	Drive system	TFT active matrix
	Pixels	786,432 pixels (1024 horizontal x 768 vertical)
Lens		Zoom lens F=1.7 ~ 2.4 f=30.5 ~ 45.8 mm
Lamp		310W UHB
Speaker		1.0W + 1.0W (Stereo)
Power supply		AC100 ~ 120V, 5.2A / AC220 ~ 240V, 2.2A
Power consumption		470W
Temperature range		0 ~ 35°C (Operating)
Size		420 (W) x 150 (H) x 310 (D) mm (Not including protruding parts) • Please refer to the figure of the section “TECHNICAL” of the end of this manual.
Weight (mass)		7.7 kg
Ports		**RGB input ports** RGB M1-D BNC (R, G, B, H, V) **Video input ports** VIDEO IN S-VIDEO COMPONENT (C_R/P_R, C_B/P_B, Y) **Audio input ports** AUDIO IN 1 AUDIO IN 2 AUDIO IN R/L **RGB output port** RGB OUT **Audio output port** AUDIO OUT **Control port** CONTROL **Other ports** NETWORK REMOTE CONTROL DC OUT
Optional Parts	Lamp	DT00601
	Air filter	NJ08081
	Others	• Please consult your dealer.

Projector

User's Manual - Safety Guide

Thank you for purchasing this projector.

WARNING • Before using, read these user's manuals of this projector to ensure correct usage through understanding. After reading, store them in a safe place for future reference. Incorrect handling of this product could possibly result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in these manuals of this projector.

NOTE • The information in this manual is subject to change without notice.
• The manufacturer assumes no responsibility for any errors that may appear in this manual
• The reproduction, transmission or use of this document or contents is not permitted without express written authority.

About The Symbols

Various symbols are used in this manual, the user's manual and on the product itself to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meanings of these symbols are described below. It is important that you read these descriptions thoroughly and fully understand the contents.

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

Typical Symbols

This symbol indicates an additional warning (including cautions). An illustration is provided to clarify the contents.

This symbol indicates a prohibited action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that disassembly is prohibited).

This symbol indicates a compulsory action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that the power plug should be disconnected from the power outlet).

Safety Precautions

⚠ WARNING

Never use the projector if a problem should occur.

Abnormal operations such as smoke, strange odor, no image, no sound, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. can cause a fire or electrical shock.

In such case, 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. Never attempt to make repairs yourself because this could be dangerous.

Disconnect the plug from the power outlet.

• The power outlet should be close to the projector and easily accessible.

Use special caution for children and pets.

Incorrect handling could result in fire, electrical shock, injury, burn or vision problem.

Use special caution in households where children and pets are present.

Do not insert liquids or foreign object.

Penetration of liquids or foreign objects could result in fire or electrical shock. Use special caution in households where children are present.

If liquids or foreign object should enter the projector, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

• Do not place the projector in a bathroom.
• Do not expose the projector to rain or moisture.
• Do not place flower vases, pots, cups, cosmetics, liquids such as water, etc on or around the projector.
• Do not place metals, combustibles, etc on or around the projector.
• To avoid penetration of foreign objects, do not put the projector into a case or bag together with any thing except the accessories of the projector, signal cables and connectors.

Never disassemble and modify.

The projector contains high voltage components. Modification and/or disassembly of the projector or accessories could result in fire or electrical shock.

Do not disassemble.

• Never open the cabinet.
• Ask your dealer to repair and clean insider.

Do not give the projector any shock or impact.

If the projector should be shocked and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

If the projector is shocked, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

Do not place the projector on an unstable surface.

If the projector should be dropped and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

• Do not place the projector on an unstable, slant or vibrant surface such as a wobbly or inclined stand.
• Use the caster brakes placing the projector on a stand with casters.
• Do not place the projector in the side up position, the lens up position or the lens down position.
• In the case of a ceiling installation or the like, contact your dealer before installation.

Safety Precautions (continued)

⚠ WARNING

Be cautious of High temperatures of the projector.
High temperatures are generated when the lamp is lit. It could result in fire or burn. Use special caution in households where children are present.
Do not touch about the lens, air fans and ventilation openings during use or immediately after use, to prevent a burn. Take care of ventilation.

• Keep a space of 30 cm or more between the sides and other objects such as walls.
• Do not place the projector on a metallic table or anything weak in heat.
• Do not place anything about the lens, air fans and ventilation openings of the projector.
• Do not use with the ventilation opening facing downwards.
• Never block the air fan and ventilation openings.
• Do not cover the projector with a tablecloth, etc.
• Do not place the projector on a carpet or bedding.

Never look through the lens or openings when the lamp is on.
The powerful light could adversely affect vision.
Use special caution in households where children are present.

Use only the correct power cord and the correct power outlet.
Incorrect power supply could result in fire or electrical shock.
• Use only the correct power outlet depending on the indication on the projector and the safety standard.
• The enclosed power cord must be used depending on the power outlet to be used.

Be cautious of the power cord connection.
Incorrect connection of the power cord could result in fire or electrical shock.
• Do not touch the power cord with a wet hand.
• Check that the connecting portion of the power cord is clean (with no dust), before using. Use a soft and dry cloth to clean the power plug.
• Insert the power plug into a power outlet firmly. Avoid using a loose, unsound outlet or contact failure.

Be sure to connect with ground wire.
Connect the ground terminal of AC inlet of this unit with the ground terminal provided at the building using the correct power cord; otherwise, fire or electric shock can result.
• Don't take the core of power cord away.

Surely connect the ground wire.

⚠ WARNING

Be careful in handling the light source lamp.

The projector uses a high-pressure mercury glass lamp made of glass. The lamp can break with a loud bang, or burn out. 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.

Please carefully read the section "Lamp".

Be careful in handling the power cord and external connection cables.

If you keep using a damaged the power cord or cables, it can cause a fire or electrical shock. Do not apply too much heat, pressure or tension to the power cord and cables.

If the power cord or cables is damaged (exposed or broken core wires, etc.), contact your dealer.

• Do not place the projector or heavy objects on the power cord and cables. Also, do not place a spread, cover, etc, over them because this could result in the inadvertent placing of heavy objects on the concealed power cord or cables.

• Do not pull the power cord and cables. When connecting and disconnecting the power cord or cables, do it with your hand holding the plug or connector.

• Do not place the cord near the heater.

• Avoid bending the power cord sharply.

• Do not attempt to work on the power cord.

Be careful in handling the battery of the remote control.

Incorrect handling of the battery could result in fire or personal injury. The battery may explode if not handled properly.

• Keep the battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.

• Do not allow the battery in a fire or water.

• Avoid fire or high-temperature environment.

• Do not hold the battery with the metallic tweezers.

• Keep the battery in a dark, cool and dry play.

• Do not short circuit the battery.

• Do not recharge, disassemble or solder the battery.

• Do not give the battery a physical impact.

• Use only the battery specified in the other manual of this projector.

• Make sure the plus and minus terminals are correctly aligned when loading the battery.

• If you observe a leakage of the battery, wipe out the flower and then replace the battery. If the flower adheres your body or clothes, rinse well with water.

• Obey the local laws on disposing the battery.

⚠ CAUTION

Be careful in moving the projector.
Neglect could result in an injury or damage.
• Do not move the projector during use. Before moving, disconnect the power cord and all external connections, and close the slide lens door or attach the lens cap.
• Avoid any impact or shock to the projector.
• Do not drag the projector.
• For moving the projector, use the enclosed case or bag if provided.

Do not put anything on top of the projector.
Placing anything on the projector could result in loss of balance or falling, and cause an injury or damage. Use special caution in households where children are present.

Do not attach anything other than specified things to the projector.
Neglect could result in an injury or damage.
• Some projector has a screw thread in a lens part. Do not attach anything other than specified options (such as conversion lens) to the screw thread.

Avoid a smoky, humid or dusty place.
Placing the projector in a smoke, a highly humid, dusty place, oily soot or corrosive gas could result in fire or electrical shock.
• Do not place near the smoking space, the kitchen or a humidifier.

Take care of the air filter to normal ventilate.
The air filter should be cleaned periodically. If the air filter becomes clogged by dust or the like, internal temperature rises and could cause malfunction. The projector may display the message such as “CHECK THE AIR FLOW” or turn off the projector, to prevent the internal heat level rising.
• When the indicators or a message prompts you to clean the air filter, clean the air filter as soon as possible.
• If the soiling will not come off the air filter, or it becomes damaged, replace the air filter.
• Use the air filter of the specified type only. Please order the air filter specified in the other manual of this projector to your dealer.
• When you replace the lamp, replace also the air filter. The air filter may be attached when you buy a replacement lamp for this projector.
• Do not turn on the projector without air filter.

Avoid a high temperature environment.
The heat could have adverse influence on the cabinet of the projector and other parts. Do not place the projector, the remote control and other parts in direct sunlight or near a hot object such as heater, etc.

Remove the power cord for complete separation.
• For safety purposes, disconnect the power cord if the projector is not to be used for prolonged periods of time.
• Before cleaning, turn off and unplug the projector. Neglect could result in fire or electrical shock.

Disconnect the plug from the power outlet.

⚠ CAUTION

Ask your dealer to cleaning inside of the projector about every two years.

Accumulations of dust inside the projector cause result in fire or malfunction. Cleaning inside is more effective if performed before every humid periods such as rainy season.

• Do not clean inside yourself because it is dangerous.

NOTE

Do not give the remote control any physical impact.

A physical impact could cause damage or malfunction of the remote control.

• Take care not to drop the remote control.
• Do not place the projector or heavy objects on the remote control.

Take care of the lens.

• Close the slide lens door or attach the lens cap to prevent the lens surface being scratched when the projector is not used.
• Do not touch the lens to prevent fog or dirt of the lens that cause deterioration of display quality.
• Use commercially available lens tissue to clean the lens (used to clean cameras, eyeglasses, etc.). Be careful not to scratch the lens with hard objects.

Take care of the cabinet and the remote control.

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

• Use a soft cloth to clean the cabinet and control panel of the projector and the remote control. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth. Do not use undiluted detergent directly.
• Do not use an aerosol sprays, solvents, volatile substances or abrasive cleaner.
• Before using chemical wipes, be sure to read and observe the instructions.
• Do not allow long-term close contact with rubber or vinyl.

About bright spots or dark spots.

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.

Be careful of printing of the LCD panel.

If the projector continues projecting a still image, inactive images or 16:9 aspect images in case of 4:3 panel, etc., for long time, the LCD panel might possibly be printed.
In such a case, please make the projector project a whole white screen for 1 hour or more. You can use the BLANK function of the projector.

About consumables.

Lamp, LCD panels, polarizors and other optical components, and air filter and cooling fans have a different lifetime in each. These parts may need to be replaced after a long usage time, even if one year has not passed since the beginning of using. For more details, please consult your dealer.

NOTE

Avoid strong rays.
Any strong ray (such as direct rays of the sun or room lighting) onto the remote control sensors could invalidate the remote control.

Avoid radio interference.
Any interfering radiation could cause disordered image or noises.
• Avoid radio generator such as a mobile telephone, transceiver, etc. around the projector.

About displaying characteristic.
The display condition of the projector (such as color, contrast, etc.) depends on characteristic of the screen, because the projector uses a liquid crystal display panel. The display condition can differ from the display of CRT.
• Do not use a polarized screen. It can cause red image.

Turn the power on/off in right order.
To prevent any trouble, turn on/off the projector in right order mentioned below unless specifying.
• Power on the projector before the computer or video tape recorder.
• Power off the projector after the computer or video tape recorder.

Take care not to fatigue your eyes.
Rest the eyes periodically.

Set the sound volume at a suitable level to avoid bothering other people.
• It is better to keep the volume level low and close the windows at night to protect the neighborhood environment.

Connecting with notebook computer
When connecting with notebook computer, set to valid the RGB external image output (setting CRT display or simultaneous display of LCD and CRT).
Please read instruction manual of the notebook for more information.

Lamp

⚠ WARNING

HIGH VOLTAGE

HIGH TEMPERATURE

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 USA)
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, make sure the power switch is off and the power cable is not plugged in, 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.

- 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 the lamp of the specified type only.
- 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.

Regulatory Notices

FCC Statement Warning

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

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

INSTRUCTIONS TO USERS: This equipment complies with the requirements of FCC (Federal Communication Commission) equipment provided that the following conditions are met. Some cables have to be used with the core set. Use the accessory cable or a designated-type cable for the connection. For cables that have a core only at one end, connect the core to the projector.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For the Customers in CANADA

NOTICE: This Class B digital apparatus complies with Canadian ICES-003.

Warranty And After-Service

Unless seen any abnormal operations (mentioned with the first paragraph of WARNING in this manual), when a problem occurs with the equipment, first refer to the "Troubleshooting" section of the "User's manual – Operating Guide", and run through the suggested checks.

If this does not resolve the problem contact your dealer or service company. They will tell you what warranty condition is applied.

DUKANE CORPORATION

FIVE-YEAR LIMITED WARRANTY

This Dukane projector is warranted to the original purchaser for a period of five (5) years from the original purchase date – in normal operating conditions – against defects in material and workmanship . DUKANE CORPORATION EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DURING THE WARRANTY PERIOD, DUKANE CORPORATION'S LIABILITY FOR ANY DEFECTIVE PRODUCT (except for the lamp, which is subject to whatever warranties the manufacturer may provide) IS LIMITED TO THE REPAIR OR REPLACEMENT OF PRODUCT AT DUKANE CORPORATION'S OPTION. REPLACEMENT PRODUCTS MAY BE NEW OR USED (used units will not exceed hours of defective unit). The following are not covered by the limited warranty and Dukane Corporation shall not be liable for:

1. Any product which is not distributed in the U.S.A. or Canada by Dukane Corporation or an authorized dealer.
2. Normal decrease in lamp light output over time.
3. Damage, deterioration or malfunction resulting from:
   - Accident, misuse, abuse, neglect, improper ventilation, fire, dust, smoke, water, lighting or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product (including proper maintenance of air filters).
   - Repair or attempted repair by anyone other than a Dukane Corporation authorized service center.
   - Any shipment of product (claims must be presented to the carrier).
   - Removal or installation of the product.
   - Any other causes which do not relate to a product defect.
   - Use of the product beyond normal operating conditions. Normal operating conditions are defined as product use not in excess of 8 hours per day and 260 days per year.
4. Cartons, carry cases, shipping cases, batteries, or any accessories used in connection with the product.
5. Service required as a result of third party components.
6. Product used as commercial rental units

Dukane corporation will pay labor and material expenses for covered items, but Dukane Corporation will not pay for the following:

1. Removal or installation charges.
2. Cost of technical adjustment, set-up, maintenance, or adjustment of user controls.
3. Payment of shipping and related charges incurred in returning the product for warranty repair.

Dukane Corporation disclaims all liability for incidental or consequential damage of any kind, including all damages arising out of any interruptions in operation of the product and all damages to software.

No person, firm, or representative is authorized to assume any obligation or to make any warranty on behalf of the Dukane Corporation other than as stated above.

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