

# HITACHI

# CP-L300



V28538

Liquid Crystal Projector

**OPERATING GUIDE**

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# HITACHI

## Liquid Crystal Projector

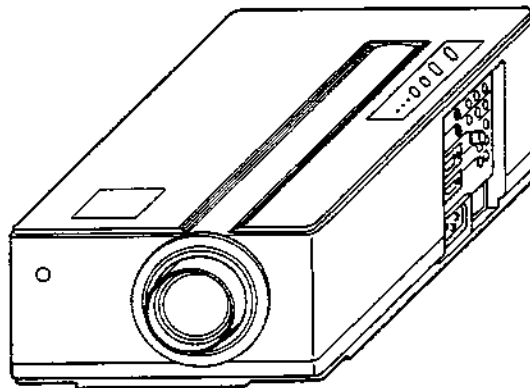
Model name

# CP-L300

## OPERATING GUIDE

Thank you very much for purchasing this Hitachi Liquid Crystal Projector.

**Please read this operating guide to use correctly.** After reading this manual, keep it carefully for future reference.



## Outline

This Liquid Crystal Projector can display NTSC/PAL/SECAM video signals plus various computer signals.

## Features

### (1) High brightness

A highly efficient optical system with a metal halide lamp ensures high brightness.

### (2) High resolution

Three separate high-definition liquid crystal panels are used for the R, G and B signals.

### (3) Compact size, light weight for portability

### (4) Vertical and horizontal inversion function

May be installed hanging from a ceiling (upside down) using the image inversion function.

### (5) Built-in speaker

3 watt amplifier with built-in speaker.

### (6) Power zoom and power focus functions

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# Before use

< Before use >

**Illustrated marks** Various illustrated marks are used in this product and instruction manual so the product is used correctly and safely, and also to protect you and others from danger and your property from being damaged.



## Warning

This shows that a person could be killed or injured if the wrong operation is done by ignoring this indication.



## Caution

This shows that a person could be injured or material may be damaged if the wrong operation is done by ignoring this indication.

Examples of illustrated marks



The  $\triangle$  mark informs you that there is a warning (including caution). The concrete details of the warning (the left diagram shows the caution for an electric shock hazard) is shown in the diagram.



The  $\odot$  mark informs you of a prohibited action. The concrete prohibited action (the left diagram shows the prohibition of disassembly) is drawn in the diagram or near it.



The  $\bullet$  mark informs you of actions you must do. The concrete instruction details (the left diagram shows "Disconnect the power plug from the power outlet") is drawn in the diagram.

## FOR THE CUSTOMERS IN U.K

THIS PRODUCT IS SUPPLIED WITH A TWO PIN MAINS PLUG FOR USE IN MAINLAND EUROPE. FOR THE U.K PLEASE REFER TO THE NOTES ON THIS PAGE.

### IMPORTANT FOR UNITED KINGDOM

#### WORDING FOR CLASS I EQUIPMENT INSTRUCTION BOOKS AND LABELS

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS 1362 fuse must be used of the same rating. If the fuse cover is detachable never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug. Fuse covers are available from your dealer.

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

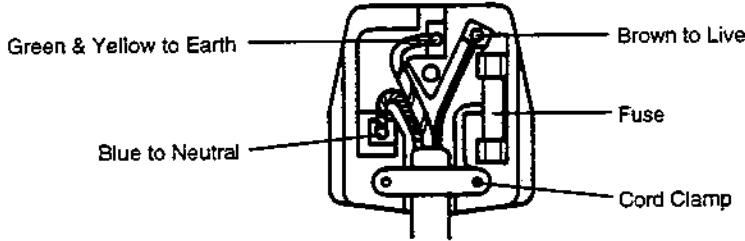
Should it be necessary to change the mains plugs, this must be carried out by a competent person, preferable a qualified electrician.

If there is no alternative to cutting off the mains plug, ensure that you dispose of it immediately, having first removed the fuse, to avoid a possible shock hazard by inadvertent connection to the mains supply.

# WARNING : THIS EQUIPMENT MUST BE EARTHED

## IMPORTANT:

The wires in the mains lead are coloured in accordance with the following code:  
 Green and Yellow = Earth, Blue = Neutral, Brown = Live.



As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Green and Yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol  $\oplus$  or coloured Green or Green and Yellow.

The wire coloured Blue must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

## [ Safety precaution ]



# Warning

### ■ Do not install this unit in

#### an unstable place.

Avoid placing it in an unstable place such as weak base, inclined floor, etc. This may cause it to drop or fall over, resulting in injury.



### ■ Do not open the cabinet.

Do not open the cabinet. There are high voltage parts inside the cabinet and this may cause an electric shock. Ask your dealer to check inside and adjust and repair the unit.



Electric shock hazard



Prohibition of disassembly

### ■ Do not remodel this unit.

Do not remodel this unit. It may cause a fire, electric shock, etc.



Prohibition of disassembly

### ■ Do not use this in a bathroom, etc.

Do not use this unit in a bathroom, etc. This may cause a fire, electric shock, etc.



Do not use near water

### ■ Do not look directly at the lens

#### when the lamp is lit.

Do not look directly at the lens when the lamp is lit. Since a strong light is used, it could damage your eyes, etc. Especially pay attention if children are present.



### ■ Do not use power supplies other

#### than that specified.

Do not use this unit with a power voltage other than specified power supply voltage. It may cause a fire, electric shock, etc.



# [ Safety precaution ]

## Warning

### ■ If any abnormality occurs.

● When there is an abnormal smell or smoke, if you use this unit as it is, this could cause a fire or electric shock, etc. When an abnormality is found, immediately turn off the power switch and pull out the power plug from the power outlet. Check that there is no smoke, etc., then contact your dealer to repair the unit. Do not repair it yourself as it is very dangerous.

● Do not use this unit as it is after trouble has occurred, such as "No picture", "No sound", "Abnormal



Pull out the power plug from the power outlet.

sound", etc. This may cause a fire, electric shock, etc. In this case, immediately turn off the power switch and disconnect the power plug, then contact your dealer to repair the unit.

● If water, etc. enters inside the unit, turn off the power switch of the unit first and disconnect the power plug and then contact your dealer. If you use it as it is, it may cause a fire, electric shock, etc.

### ■ Do not insert any foreign object.

● Do not insert a metal or flammable object inside through the ventilation holes, etc. This may cause a fire, electric shock, etc.



● If foreign matter enters inside, turn the power switch off and disconnect the power plug from the power outlet and contact your dealer. If you use as it is, it may cause a fire, electric shock, etc. Be careful especially if children could touch the unit.



Pull out the power plug from the power outlet.

### ■ Do not apply any shock.

If you drop this unit or if the cabinet is broken, turn off the power switch, disconnect the power plug and contact your dealer. If you use it as it is, it may cause a fire, electric shock, etc.



Pull out the power plug from the power outlet.

### ■ Do not put a container, etc.

with liquid on this unit.

Do not put a vase, flowerpot, cosmetic container, medicine or water and small metal objects on this unit. If liquid spills and enter inside the unit, it may cause a fire, electric shock, etc.



### ■ Be careful in handling the power cord.

● Securely connect the wall outlet and the inlet of this equipment.

● Do not scratch, damage or process the power cord. Do not bend it forcibly. Also do not put a heavy object on it, do not heat it and do not pull it. If you do, the power cord may be damaged and it may cause a fire, electric shock, etc.

· Do not pull the cord.

· Do not put a heavy object on it.

· Do not damage the cord.

· Do not put it near a heating device.

● Be careful that this unit is not placed on the power cord. The power cord may be damaged and it may cause a fire, electric shock, etc. If the cord is covered with a carpet, etc. a heavy object may be put on it without your realizing it.

● If the cord is damaged (core wire is exposed, disconnected, etc.), ask your dealer to replace it. It may cause a fire, electric shock, etc.



● Check that no dirt adheres to the power plug and fully insert without any play. If dirt adheres or the connection is incomplete, it may cause a fire, electric shock, etc.



# Caution

## ■ Do not step on this unit or

**do not put a heavy object on it.**

- Do not step on this unit. Especially pay attention if children are present. If you do, the unit may fall over or may be broken causing an injury.



- Do not put a heavy object on this unit. If you do, the unit may fall due to its imbalance or it may drop, causing an injury.

## ■ Do not block the ventilation holes.

Do not block the ventilation holes. If the ventilation holes are blocked, the heat inside may build up and it may cause a fire. Do not use this unit in the following ways: Upside down. On its side. In a poorly ventilated, narrow place. On a carpet or bedspread. Covered with a tablecloth. Place this unit so that the ventilation holes are kept 10cm or more away from the wall.



## ■ Cleaning

Be sure to pull out the power plug from the power outlet for safety when cleaning.



Pull out the power plug from the power outlet.

## ■ Do not place this unit in a moist or dusty place.

- Do not place this unit in a moist or dusty place. It may cause a fire, electric shock, etc.
- Do not place this unit where it would be exposed to soot or steam, near a cooking stove or humidifier, etc. It may cause a fire, electric shock, etc.



## ■ Set the caster stoppers.

When this unit is installed on the table with casters, set the caster stoppers. If the table moves, it may fall over, causing an injury.



## ■ Handle the power cord carefully.

- Do not bring the power cord near a heating device. The shield of the cord may melt and it may cause a fire, electric shock, etc.
- Do not insert/disconnect the power plug with wet hands. It may cause an electric shock.
- When the power plug is to be disconnected, do not pull the power cord. The power cord may be damaged and it may cause a fire, electric shock, etc. Be sure to hold the power plug.



## ■ Use of batteries.

- Do not use batteries not specified for this unit. Do not use new batteries mixed together with old ones. This may cause a fire, injury due to burst of battery, liquid leakage.
- When inserting batteries in this unit, pay attention to the direction of the  $\oplus$  and  $\ominus$  polarity indications and insert the batteries correctly. If the polarities are confused, it may cause injury or damage near the unit due to burst batteries, liquid leakage, etc.



## ■ When you are not going to use for a long time.

When you are not going use this unit for a long time because you are going on a trip, etc., be sure to pull out the power plug from the power outlet for safety. And also apply cover to the lens so that the lens is not damaged.



Pull out the power plug from the power outlet.



# Caution

## ■ Clean inside the unit at

**least once a year.**

Ask your dealer to clean inside the unit at least once a year. If the unit is left with too much dust inside as it is for a long this without cleaning, it may cause a fire. Especially it is effective to clean before the rainy season starts. Consult your dealer for the cost of the cleaning the inside the unit.



## ■ Caution when carrying it .

When this unit is to be moved, apply a cover to the lens and be sure to disconnect the power plug from the power outlet and check that all external connection cords are removed before moving it. If not, the cord may be damaged and it may cause a fire, electric shock, etc.



Pull out the power plug from the power outlet.

## [ General cautions ]

### ■ Do not place this unit where it gets hot.

Be careful if you place the unit outdoors, in a place exposed to direct sunlight or near a heating device, the cabinet and parts could be affected.



### ■ Volume.

Use at the proper volume level so that it does not bother persons in the neighborhood. Especially, since the sound is likely to carry well at the night even at a low volume, consider the neighborhood to a good living environment.

### ■ Cleaning the lens.

To clean the lens, use a generally-available lens cleaning tissue (used for cleaning lens of camera, glasses, etc.). Be careful not to scratch the lens with a hard object.



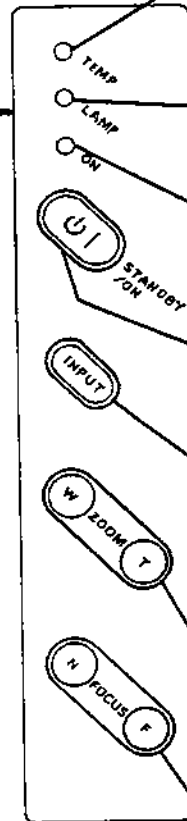
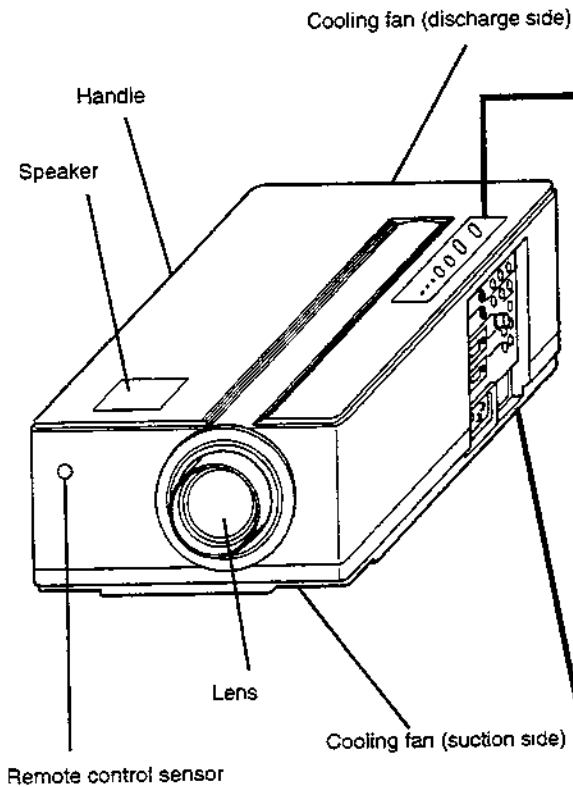
### ■ Cleaning the cabinet .

- Since many plastic materials are used on the surface of the cabinet, if the surface is cleaned using benzene, thinner, etc., it may change in quality or the coating may be peeled off. Avoid using chemicals.
- When a chemically-treated cloth is used, follow the cautions that come with the cloth.
- Do not spray a volatile agent such as insecticide on the unit. Do not leave a rubber or vinyl object touching the cabinet for a long time. It may cause the cabinet to change in quality or the coating to peel off.
- Clean the dirt from the cabinet and operation panel by dusting lightly with a soft cloth. If the dirt is conspicuous, wipe off with a cloth moistened with detergent diluted with water, then wipe off with a dry soft cloth.

### ■ Rest your eyes occasionally when viewing for a long time.

# Names and functions of each part

## Main unit



- TEMP indicator**  
This blinks when temperature inside the projector is too high.  
(See page 18.)
- LAMP indicator**  
This blinks when the lamp does not light.  
(See page 18.)
- ON indicator**  
This blinks in the standby mode and lights in the operation mode. (See page 18.)
- STANDBY/ON button**  
Power ON/OFF button.  
Off sets the unit in standby mode.
- INPUT button**  
To select the input source.  
Each time this button is pressed, the input source is changed in sequence as shown below.  
VIDEO1 → VIDEO2 → RGB1 → RGB2
- ZOOM button**  
Adjusts picture size.  
W : Picture becomes wider.  
T : Picture becomes telescopic.
- FOCUS button**  
Adjusts focus.  
N : Near  
F : Far

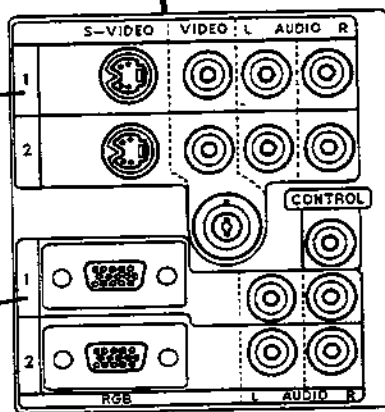
- Use the remote control transmitter within the range of about 5m from the front of the remote control light receiving window and within 30° to both the left and right.

### VIDEO input terminal

- S-VIDEO input terminal  
Mini DIN-4pin connector (1/2)
- VIDEO input terminal  
RCA Jack (1/2)  
BNC connector (terminal 2 only)
- AUDIO L/R input terminal  
RCA Jack (1/2)

### RGB input terminal

- RGB input terminal  
D sub 15pin terminal (1/2)
- AUDIO L/R input terminal  
RCA Jack (1/2)



When a monaural sound signal is to be input, connect it to the AUDIO L input terminal.



### AC IN socket

Connect the provided power cord.



### MAIN POWER switch

Main power ON/OFF switch.

- : OFF
- | : ON



# Names and functions of each part (continued)

## Remote control transmitter

### STANDBY/ON button

Power ON/OFF button.  
OFF sets the unit in standby mode.

### INPUT SELECT button

To select or change the input source.

### MENU button

Picture adjustments.  
Refer to page 12 for details.

### LIGHT button

Press this button when you are going to use the remote control in a dark place. Lights all remote control buttons.  
When pressing this button, other buttons are inoperable.

### CHANGE button

Image inversion  
H : Inverts the projected picture horizontally.  
V : Inverts the projected picture vertically.

### RESET button

Resets unit to factory settings.

### CALL button

To check the input source.

### ZOOM button

Adjusts picture size.  
W : Picture becomes wider.  
T : Picture becomes telescopic.

### FOCUS button

Adjusts focus.  
N : Near  
F : Far

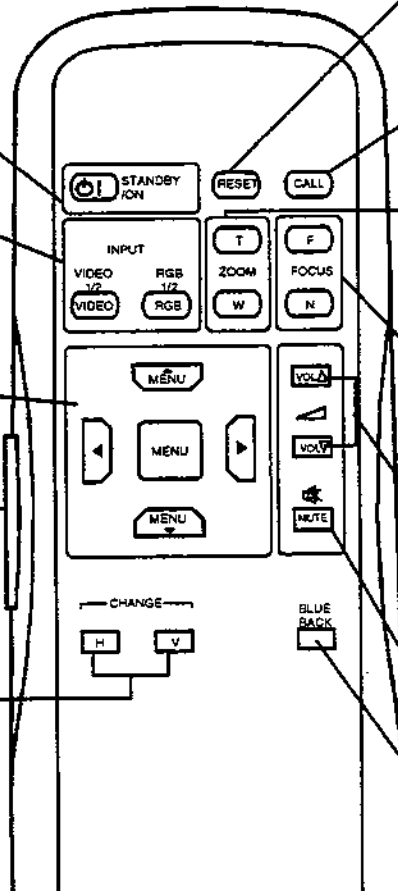
### VOLUME button

Adjusts the volume  
VOL▲ : To increase the volume.  
VOL▼ : To decrease the volume.

### MUTE button

### BLUE BACK button

Use this button to turn ON/OFF the blue back function.

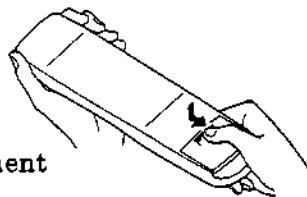


## How to insert batteries

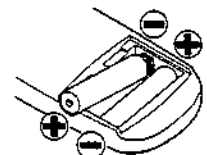
Insert the provided batteries (R6P or SUM-3) into the remote control transmitter.

- 1 Remove the battery compartment cover.

Slide the battery compartment cover in the direction of the arrow while pressing slightly down on it.



- 2 Insert the batteries as illustrated inside the battery Compartment.



- 3 Replace the cover.

### ⚠ Caution Cautions on use of batteries

- Do not use batteries not specified for this unit. Also do not use old and new batteries together. It may cause a fire, injury due to burst of battery or liquid leakage.
- When inserting batteries, pay attention to the direction of the ⊕ and ⊖ polarity indications and insert the batteries correctly. If the polarities are confused, it may cause injury or damage near the unit due to a burst of battery or liquid leakage.

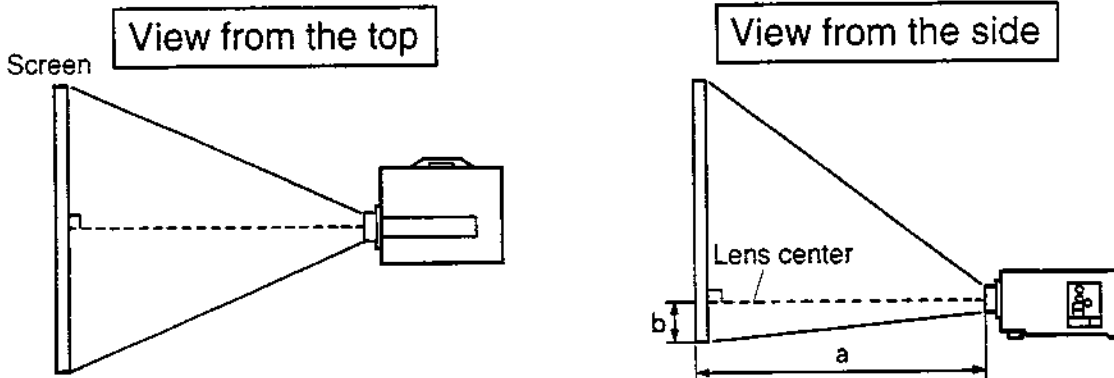
### ⚠ Caution Cautions on use

- Do not drop the remote control transmitter or apply any shock to it.
- Do not let the remote control transmitter get wet and do not put it on a wet object. It may cause a malfunction.
- If you are not going to use it for a long time, remove the batteries from the remote control transmitter.
- If operation of the remote control becomes difficult, replace the batteries.

# Installation

## Example of the liquid crystal projector and screen installation

Determine picture size and projection distance as illustrated below.



Screen m	a m		b mm
	Minimum	Maximum	
1.0	1.4	2.2	89
1.5	2.1	3.4	132
2.0	2.8	4.5	175
2.5	3.5	5.7	221
3.0	4.2	6.8	264
3.8	5.3	8.6	330
5.0	7.1	11.4	439

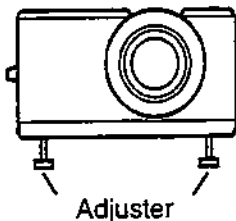
a : Distance from the projector to the screen

b : Length from the center of the lens to the bottom of the picture

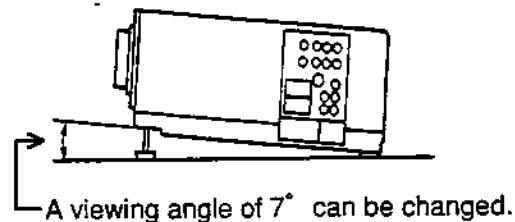
## How to use adjusters

Adjust the projection position using the adjusters at the bottom of the projector.

View from the front



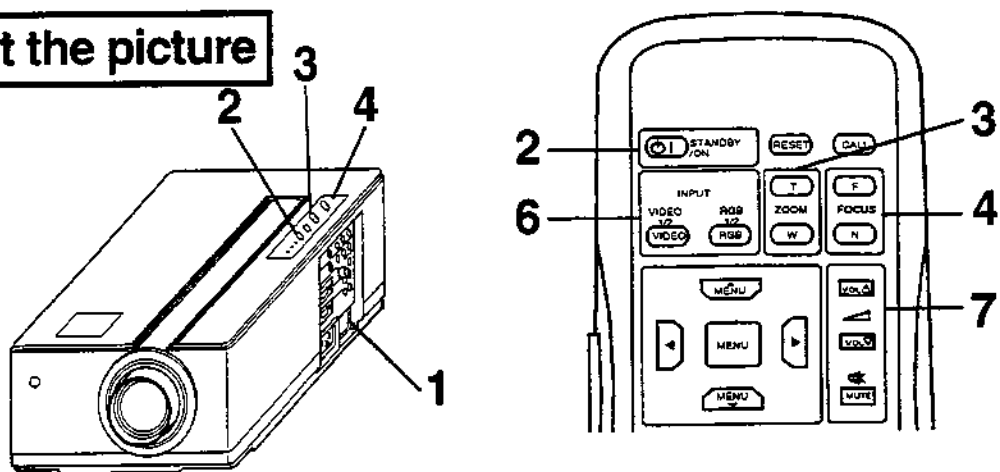
View from the side



Raise	Lower

# Basic operations

To project the picture

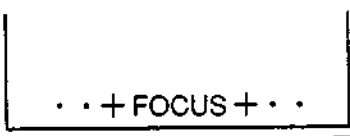


**1 Turn the MAIN POWER switch of the projector on. [ I : ON ]**  
 • The ON indicator will light up orange.

**2 Press the STANDBY/ON button of the projector or the remote control.**  
 • The ON indicator blinks (green) and then lights (green).  
 • The ON indicator will blink green during warm-up and light up.

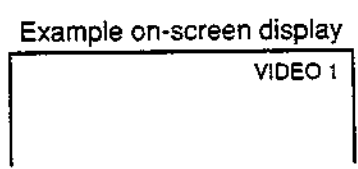
**3 Adjust the picture size using the ZOOM button.**  
 • The picture becomes wider by pressing [ W ], and telescopic by pressing [ T ].

**4 Adjust the focus using the FOCUS button.**  
 (1) Press the FOCUS button. The on-screen display shown on the right appears.  
 (2) Adjust the focus so that the picture is clear using the FOCUS button.



**5 Power on all connected equipment.**  
 The method of connecting various equipment, see on the page 14~17.

**6 Press the INPUT button of the projector or the INPUT SELECT (VIDEO or RGB) button of the remote control to select the source of the signal to be projected on the screen.**  
 • The selected signal input is displayed at the top right of the screen.

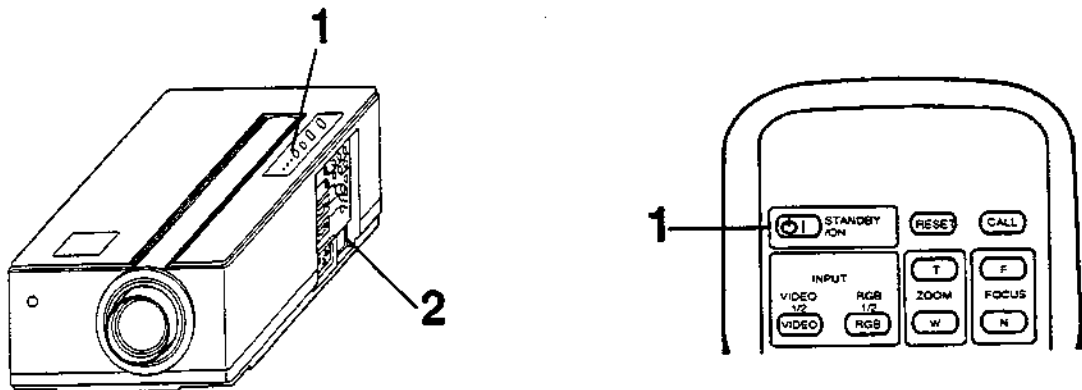


**7 Adjust the volume using the VOLUME button.**

- [ VOL▲ ] : Volume is increased.
- [ VOL▼ ] : Volume is decreased.
- [ MUTE ] : Sound is muted.

In the mute mode, the color of the volume level indication bar changes from green to red.

## To turn off the power



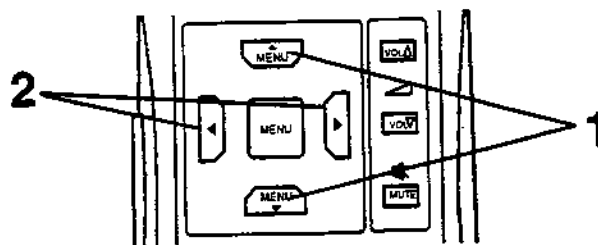
### 1 Press the **STANDBY/ON** button of the projector or remote control.

- The ON indicator lights up orange and the lamp turns off. (About 1 minutes later), the fan stops and the indicator blinks orange.

### 2 Turn the **MAIN POWER** switch of the projector off. [○ : OFF]

**Caution** After the **STANDBY/ON** button is pressed, the fan rotates for about 1 minute to cool the projector.

## Picture adjustment



### 1 Press the **MENU** button of the remote control.

- When the **MENU** button is pressed, adjustment items are displayed on the screen.
- Item displayed in green can be adjusted.

# Picture adjustment (continued)

**2** Select the Item to be adjusted using the  /  button and adjust using the  /  button.















- To return to the initial setting, press the RESET button of the remote control(except H PHASE). "NORMAL" is displayed at the top right of the screen.

(Example) VIDEO (NTSC) signal input

VIDEO 1	
BRIGHT	
TINT	
COLOR	
CONTR	
SHARP	
LANGUAGE	ENGLISH
SYSTEM	AUTO NTSC PAL SECAM

(Example) RGB signal input

RGB 1	
BRIGHT	
CONTR	
V POSI	:
H POSI	:
H PHASE	:
H SIZE	:
LANGUAGE	ENGLISH

Adjustment Item	Details of adjustment
<b>BRIGHT</b> (BRIGHTNESS)	
<b>TINT</b>	
<b>COLOR</b> (COLOUR)	
<b>CONTR</b> (CONTRAST)	
<b>SHARP</b> (SHARPNESS)	
<b>LANGUAGE</b>	 /  : Changes 7 languages cyclically. Menu language is changed when you push the  /  button after you select language by the  /  button.
<b>SYSTEM</b>	 /  : Changes 4 systems cyclically. (AUTO NTSC PAL SECAM)
<b>V POSI</b> (V POSITION)	 /  : Moves the picture up and down.
<b>H POSI</b> (H POSITION)	 /  : Moves the picture 1 dot to the right and left.
<b>H PHASE</b>	When characters are displayed, if the picture flickers with poor contrast, adjust the H PHASE to decrease flickering.
<b>H SIZE</b>	 : Widens the horizontal size of the picture.  : Narrows the horizontal size of the picture.

## Caution

- TINT cannot be adjusted with a PAL and SECAM video signal input.
- TINT, COLOR, SHARP and SYSTEM cannot be adjusted with an RGB signal input.
- V POSI, H POSI, H PHASE and H SIZE cannot be adjusted with a VIDEO signal input.

## Memory function

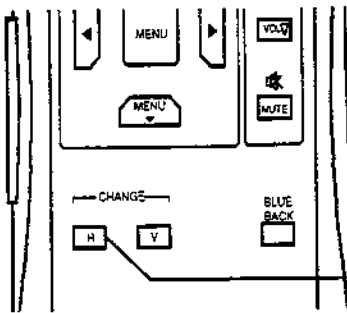
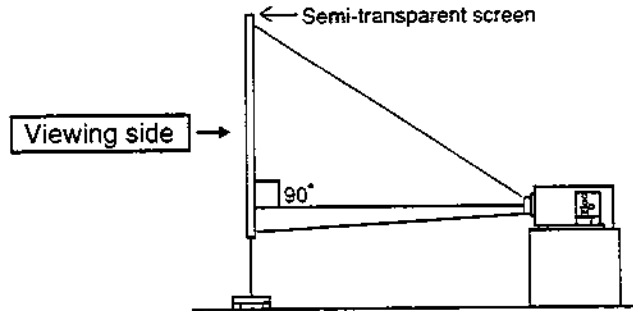
Individual memory functions are provided for the VIDEO1, VIDEO2, RGB1 and RGB2 input terminals. Adjustments are saved after power off.

# Horizontal inversion and vertical inversion

## To invert the picture horizontally (left and right)

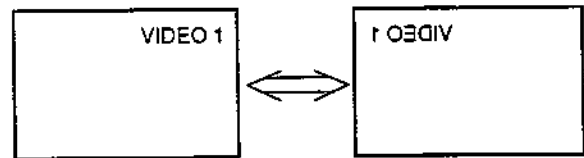
The picture can be horizontally inverted to allow the installation pictured.

- By projecting the picture on the semi-transparent material (screen), the picture can be seen from the back.



### Press the CHANGE **H** button

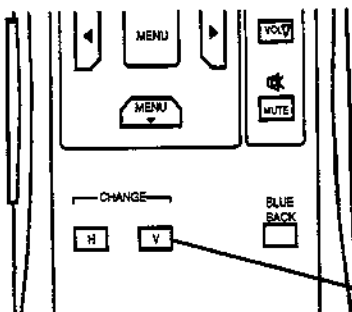
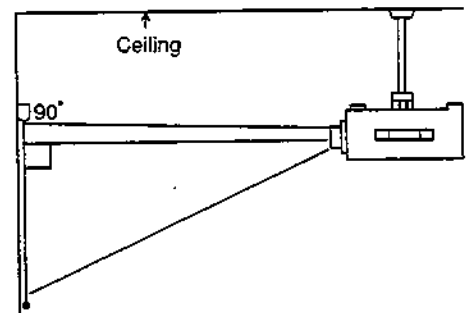
- Press the CHANGE **H** button of the remote control to horizontally invert the picture.
- To return to the original settings, press the CHANGE **H** button again.



## To invert the picture vertically (top and bottom)

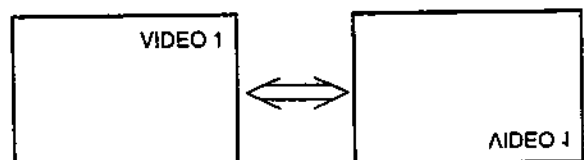
The picture can be vertically inverted to allow the projector to be installed upside down as pictured.

Should be contact your dealer, when hanging from a ceiling.  
(Designated material is necessary.)



### Press the CHANGE **V** button

- Press the CHANGE **V** button of the remote control to vertically invert the picture.
- To return to the original settings, press the CHANGE **V** button again.

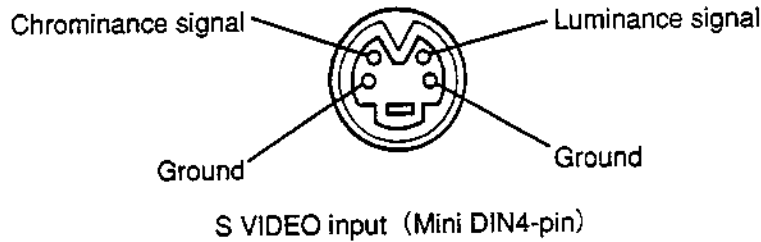


# Connection to the video signal input terminals

## 1. Input signal

S-VIDEO signal	Luminance signal 1.0Vp-p, 75 Ω termination Chrominance signal 0.286Vp-p (burst signal), 75 Ω termination
VIDEO signal	1.0Vp-p, 75 Ω termination
AUDIO signal	200mVrms, 20k Ω below

## 2. Signal input terminal



**Caution** Video input signal terminals have priority in the following order.  
 ① S-VIDEO input terminal ② RCA jack input terminal ③ BNC connector terminal (VIDEO2 only)

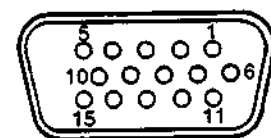
# Connection to the RGB signal input terminals

## 1. Input signal

Video signal	Analog 0.7Vp-p 75 Ω termination (Positive polarity)
Horizontal sync signal	TTL level (Positive/negative polarity)
Vertical sync signal	TTL level (Positive/negative polarity)
Composite sync signal	TTL level

## 2. Signal input terminal

1	Video signal (Red)	9	N.C
2	Video signal (Green)	10	Ground
3	Video signal (Blue)	11	Ground
4	N.C	12	N.C
5	Ground	13	Horizontal /Composite sync signal
6	Ground (For R)	14	Vertical sync signal
7	Ground (For G)	15	N.C
8	Ground (For B)		



D-sub 15pin shrink terminal

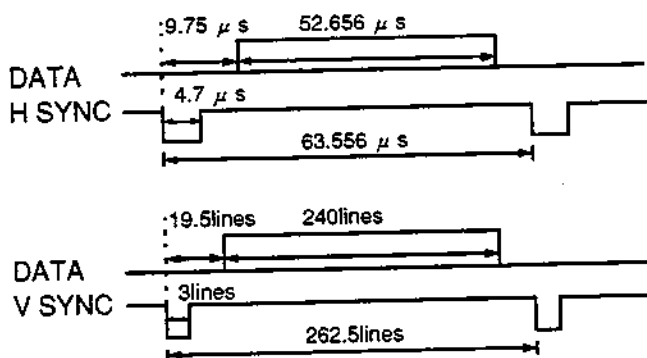
### 3. Example of computer signal

Computer / signal source	Resolution H × V	fH (kHz)	fV (Hz)	Sync Signal	Interlaced / Non-interlaced
15kHz RGB (NTSC)	—	15.7	60	H,V composite	Interlaced
VGA-1 (IBM compatible)	640 × 350	31.5	70	H,V separate H : Positive V : Negative	Non-interlaced
VGA-2 (IBM compatible)	640 × 400	31.5	70	H,V separate H : Negative V : positive	Non-interlaced
VGA-3 (IBM compatible)	640 × 480	31.5	60	H,V separate H : Negative V : Negative	Non-interlaced
Macintosh13inch mode (Apple)	640 × 480	35.0	66.7	H,V separate H,V composite	Non-interlaced
VESA 72Hz standards	640 × 480	37.9	72	H,V separate H : Negative V : Negative	Non-interlaced

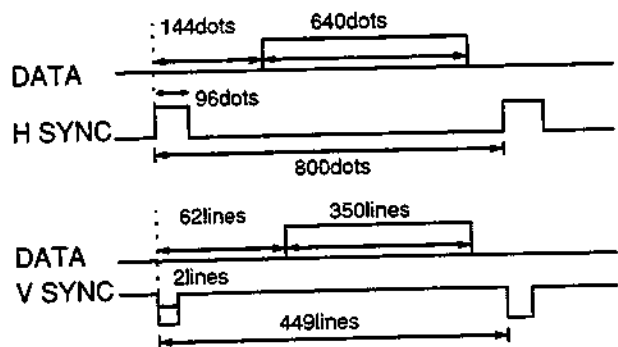
### 4. Initial set signals

The following signals are initially set. The settings may be different depending on the computer type. In this case, adjust the settings referring to pages 12.

(1) 15kHz RGB(NTSC)

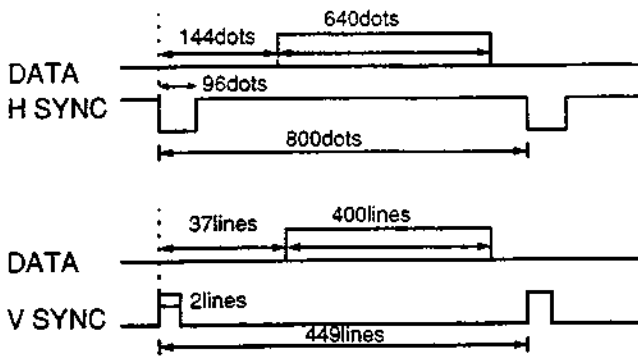


(2) VGA-1

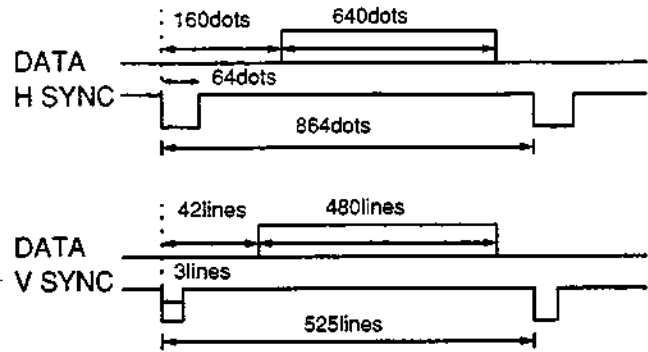




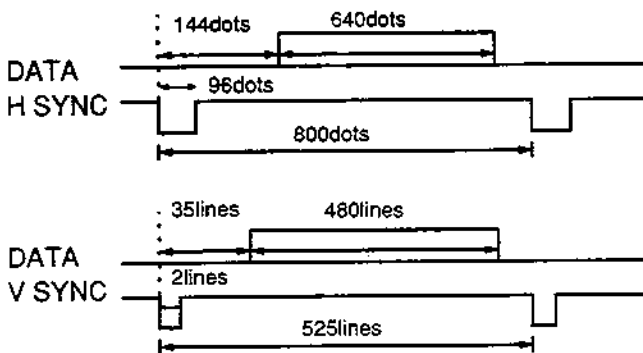
(3) VGA-2



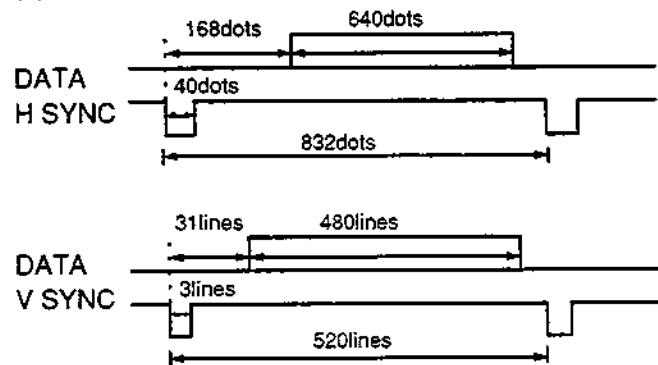
(5) Macintosh13inch mode



(4) VGA-3



(6) VESA 72Hz standards.



## 5. Connection to the computer

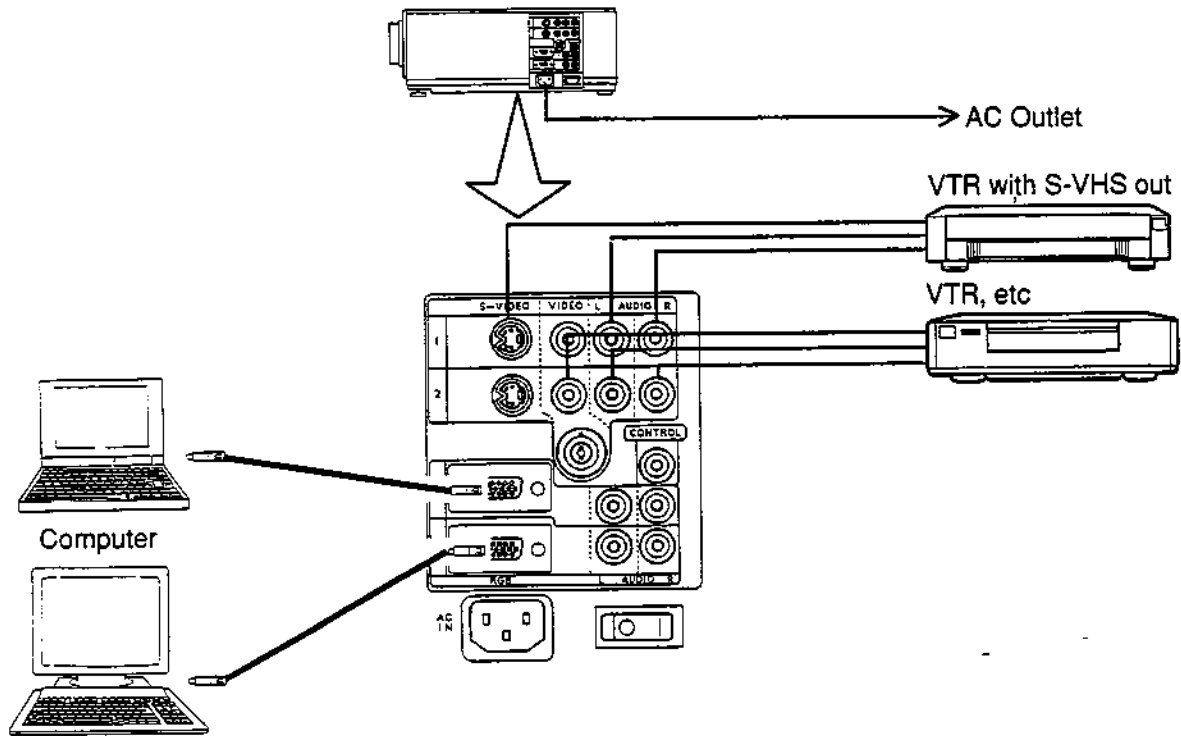
Turn off the power of both the projector and computer before connecting. Connect the computer to the RGB terminal of the projector using an appropriate cable.

Refer to the chart below for cable types.

Name	Type	Computer	Connector type	
VGA cable	SC-200I	IBM PC/AT compatible	Dsub15pin shrink — Dsub15pin shrink	Provided
MAC adaptor cable	SC-A25I	Apple Macintosh	Dsub15pin shrink — Dsub15pin	Provided

# Example of system setup

Connecting various equipment.



**Caution** Turn power off to all devices before connecting.  
Refer to the instruction manual of each device before connecting.

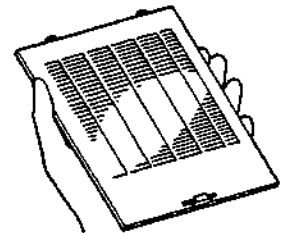
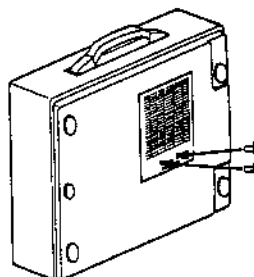
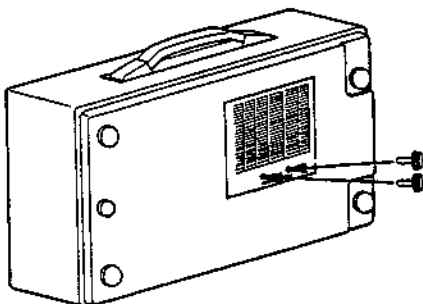
## Cleaning the air filter

Clean the air filter about every 100 hours.

- 1 Turn off the MAIN POWER switch of the projector and pull out the power cord.
- 2 Remove the air filter from the bottom.

① Remove 2 screws.

② Remove the air filter.



# Cleaning the air filter (continued)

## 3 Clean the air filter using a vacuum cleaner.

If dirt is still present, wipe the air filter with a cloth moistened with water and wipe with a dry cloth.

## 4 Re-install the air filter.

**Caution** If air filter is stuffed with dust, etc., protection circuit will turn the power off.  
(TEMP indicator lights up red.)

# Lamp

The following symptoms may indicate a worn lamp :

- A dark picture.
- LAMP indicator lights up red.

The lamp should be replaced, contact your dealer. (Estimated operating time is approximately 700 hours)

Also LAMP indicator will light when the lamp becomes too hot.

Turn off the power and let the projector cool for 20 minutes.

Turn on. If LAMP indicator still lights up red, contact your dealer.

# Message table

## On-screen display

The following messages are displayed on the screen.

NO SIGNAL	Signal is not input.
SYNC IS OUT OF RANGE	The horizontal frequency of the input signal exceeds the range of the projector, it cannot be displayed.

## Indicator display

The ON indicator and LAMP indicator will light or blink in the following cases.


	Indicator status	Meaning	Remedy
ON indicator	Lights orange	Standby mode	—————
	Blinks green	During warming up	—————
	Lights green	During operation	—————
	Blinks orange	During cooling down	—————
LAMP indicator	Lights red	Lamp cannot light	Cool projector by power off for 20 minutes.
	Blinks in red	Air filter detached	Reseat the air filter.
TEMP indicator	Lights red	Temperature inside too high	Correctly reinstall so as not to block the ventilation holes.

When the LAMP indicator lights or blinks, turn the power off. If the problem cannot be recovered, contact your dealer.

# When you think something wrong

Check the following again before asking for service.

If the trouble cannot be recovered, consult your dealer.

Phenomena	Cause	Check point	Page
Power cannot be turned on.	<ul style="list-style-type: none"> <li>• The Main power is not turned on.</li> <li>• The power cord is disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>• Turn the MAIN POWER switch on.</li> <li>• Insert the power cord into an AC socket.</li> </ul>	P10 P7
No picture and sound	<ul style="list-style-type: none"> <li>• The setting of the input source is not correct.</li> <li>• Wiring to the projector is not correct.</li> </ul>	<ul style="list-style-type: none"> <li>• Set the correct input using the input select button of the projector or the remote control.</li> <li>• Connect the cable correctly.</li> </ul>	P7,P8 P7,P17
Only picture is displayed with no sound	<ul style="list-style-type: none"> <li>• Wiring to the projector is not correct.</li> <li>• The volume is set to minimum.</li> <li>• The unit enters the mute mode.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect the cable correctly.</li> <li>• Press the VOL button.</li> <li>• Press the MUTE button.</li> </ul>	P7,P17 P10 P10
Only sound is heard without a picture	<ul style="list-style-type: none"> <li>• Wiring to the projector is not correct.</li> <li>• The brightness is set fully to the dark side.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect the cable correctly.</li> <li>• Press the MENU button and select BRIGHT and press the  button.</li> </ul>	P7,P17 P12
Colour is weak and tint is incorrect	The colour and tint have been adjusted incorrectly.	Adjust the colour and tint correctly.	P12
Picture is dark	<ul style="list-style-type: none"> <li>• The brightness and contrast has been adjusted incorrectly.</li> <li>• The lamp has not been adjusted.</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the brightness and contrast correctly.</li> <li>• Replace the lamp with a new one.</li> </ul>	P12 P17
Picture is not clear	Focus is not matched.	Adjust the focus.	P10
LAMP indicator lights red.	Trouble with the lamp.	Turn off the power and leave for 20 minutes ; then turn the power on again.	P7,P18
TEMP indicator lights red.	Inside the projector too hot.	Do not block the venational holes.	P5
LAMP indicator blinks red.	Air filter detached.	Reseat the air filter.	P17,P18

A bright dot may be seen in the picture. This is a phenomenon peculiar to the liquid crystal and is not a problem.

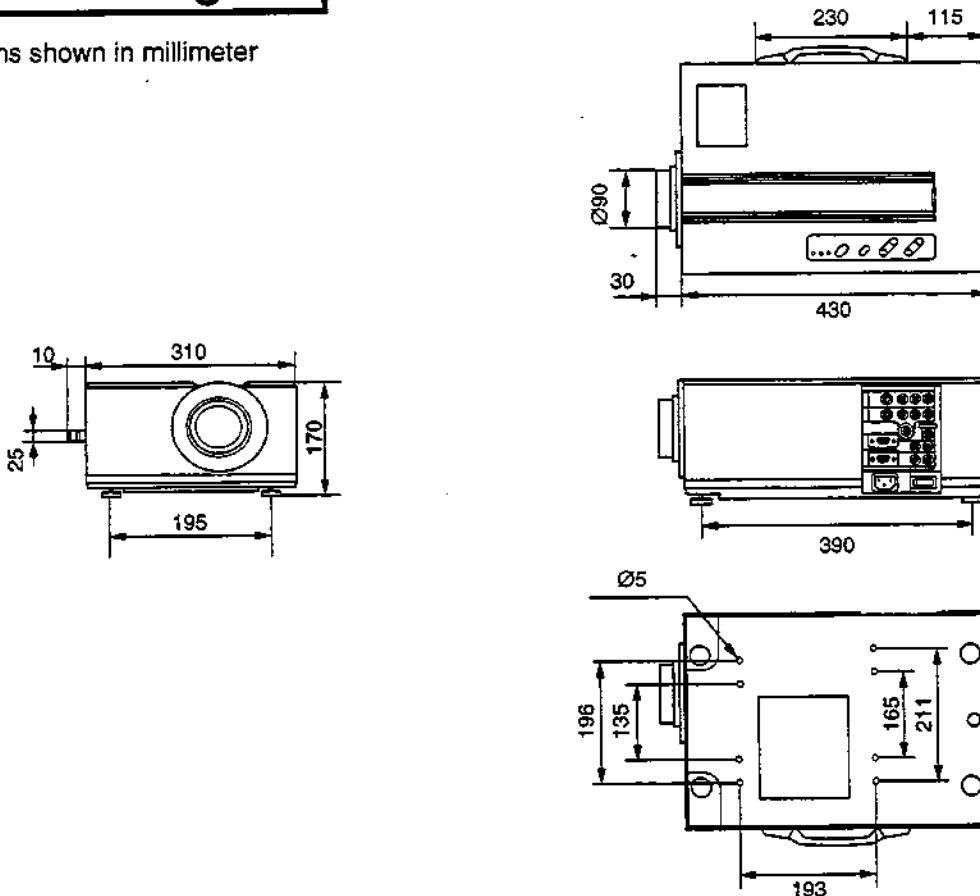
# Specifications

- All specifications are subject to change without notice.
- This Liquid crystal projector set is designed for use in Europe only.

Product name		Liquid crystal projector
Model name		CP-L300
Display system		3 sheets of liquid crystal panels, 3 primary colour lights shutter system
Liquid crystal panel	Panel size	33mm
	Drive system	TFT active matrix
	Number of pixels	311,696 pixels (V484 × H644)
Lens		Zoom lens F=3.0~3.8 f=46.5~74.4mm
Lamp		Metal halide lamp 250W
Speaker		Max. 3W (monaural)
Power supply		AC220~240V
Useable temperature range		0~35°C
Dimensions		320 (W) × 170 (H) × 460 (D) mm
Weight		11kg
Input terminal	Video signal input terminal	S VIDEO : Mini DIN4-pin terminal VIDEO : RCA Jack terminal BNC terminal (VIDEO 2only) AUDIO : RCA Jack terminal
	RGB signal input terminal	RGB signal : D-sub15pin shrink terminal AUDIO : RCA Jack terminal
Accessories		Remote control ..... 1      Batteries R6P (or SUM-3) ..... 2 Power cord ..... 1      VGA cable ..... 1 MAC adaptor cable ..... 1      Video/Audio cable ..... 1

## Dimension diagram

All dimensions shown in millimeter



# HITACHI

## HITACHI SALES NORWAY A/S

Bruket 31  
1602 Fredinkstad  
Norway  
Tel : (0)69-32 82 55 (47)  
Fax : (0)69-32 86 93

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Kuldysen 13, DK-2630  
Taastrup  
Denmark  
Tel : (0)43-99-92 00 (45)  
Fax : (0)43-99-93 92

## Hitachi Sales Scandinavia AB

Finland Office  
Takojankatu 5, 15800  
Lahti 80  
Finland  
Tel : (9)18-752 7804 (358)  
Fax : (9)18-751 5273

## HITACHI SALES EUROPA GmbH

Rungedamm 2  
21035, Hamburg  
Germany  
Tel : (0)40-734 11-133 (49)  
Fax : (0)40-734 11-121

## HITACHI SALES AG

Bahnhofstrasse 19  
5600 Lenzburg  
Switzerland  
Tel : (0)64-50 22 11 (41)  
Fax : (0)64-52 02 42

## HITACHI SALES ITALIANA S.P.A.

via A.Kuliscioff No.33-20152  
Milano  
Italy  
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Fax : (0)2-4122852

Hitachi Home Electronics (Europe) Ltd.

Hitachi House  
Station Road, Hayes  
Middlesex UB3 4DR  
UNITED KINGDOM  
Tel : (0)181-849-2000 (44)  
Fax : (0)181-561-4565