



This training course provides service technician training for the Mimosa-PJ1 series.

It assumes that you already know the Antares-PJ1. If this is not true, please study the course for the Antares-PJ1 before you start the course for the Mimosa-PJ1.

To learn about this machine, please study the user's guide and the field service manual in addition to this TTP.



No additional notes



## What Models are there in the Series?

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- SVGA models (800 x 600)
  - Mimosa-PJ1 CS 1 (Y080): PJ S2150
  - Mimosa-PJ1 CS 2 (Y081): PJ S2160
  - Mimosa-PJ1 CS 3 (Y082): PJ S2170
  - Mimosa-PJ1 CS 4 (Y083): PJ S2180
- XGA models (1024 x 768)
  - Mimosa-PJ1 CX 1 (Y084): PJ X2150
  - Mimosa-PJ1 CX 2 (Y085): PJ X2160
  - Mimosa-PJ1 CX 3 (Y086): PJ X2170
  - Mimosa-PJ1 CX 4 (Y087): PJ X2180
- These are compact entry-level models with standard features.
- The models in this series cannot be used as network projectors.
  - These models do not work with 'Network Utility', 'Projector Management Utility', or @Remote.

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There are 4 SVGA models. The parts for these models are interchangeable.  
There are 4 XGA models. The parts for these models are interchangeable.

## ■ Main Specifications

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- Power Consumption: 225W (ECO mode), 280W (Full mode)
- Weight: 5.5 lbs (2.5 Kg)
- Projection System: Single DLP® 0.55" chip
- Resolution: See the previous slide
- Lens: F# 2.41 ~ 2.55, f=21.79 ~ 23.99 mm, 1.1X Zoom Lens
- Lamp: High-pressure mercury lamp (200W)
- Lamp Life: 3000 hours typical (Full Mode), 4000 hours typical (ECO Mode)
- Projection screen size: 30 ~ 300 inch
- Projection distance: 1.2 ~ 13.1m (Focus range)
- Speaker: 2W (Mono)

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No additional notes

## Features

- This product can be installed by users, except when mounted on a ceiling.
- This product is designed for user maintenance. Regular on-site maintenance is not needed.
- There is no display panel, but LEDs show the symptoms for troubleshooting (blinking/lit, number of times the LEDs blink, etc).
- A service mode is available.

No additional notes

- PJ Replacement Lamp Type 20 (Y228)
  - 200W mercury lamp
  - Life: 3000 hours (normal mode), 4000 hours (Eco mode)
    - There may be a 50% decrease in brightness at the end of the lamp's life.

No additional notes

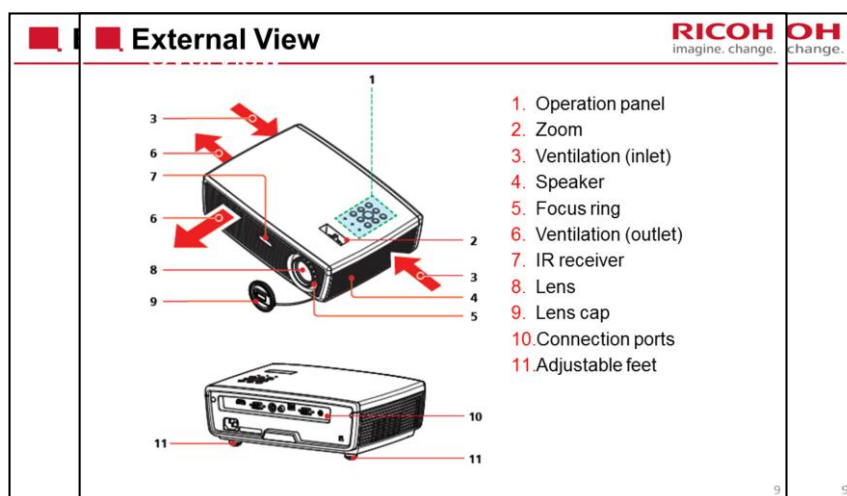
- There is no near-end alert.
  - The lamp end alert occurs when the machine calculates that the life time has expired.
  - If used in Normal Mode only, the alert appears after 3,000 hrs projection time
  - If used in Eco Mode only, the alert appears after 4,000 hrs projection time
  - If the user switches between modes, the machine calculates when to display the alert based on how long the lamp was used in each mode.

No additional notes

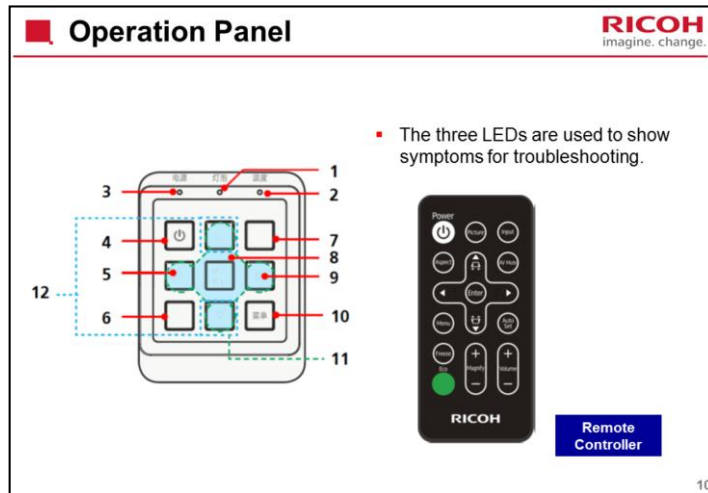
- Projector lamps normally contain mercury vapour.
- These lamps can rupture due to impact or being used longer than their life expectancy.
  - The time that the breakage will occur differs widely for each lamp and its circumstances of use.
- These lamps must be disposed of in accordance with local environmental regulations.

No additional notes

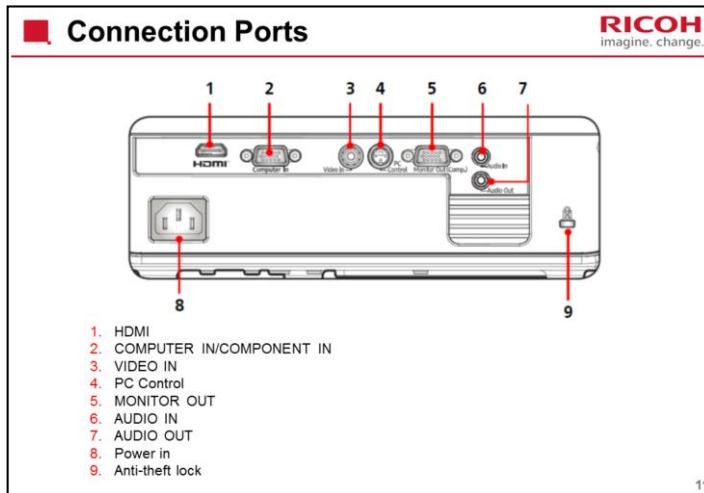






No additional notes



- 1 Lamp indicator
- 2 Temp indicator
- 3 Power indicator
- 4 Power
- 5 Volume
- 6 Input selector
- 7 Menu
- 8 Enter
- 9 Volume +
- 10 AV Mute
- 11 Four Selector Keys
- 12 Keystone



No additional notes



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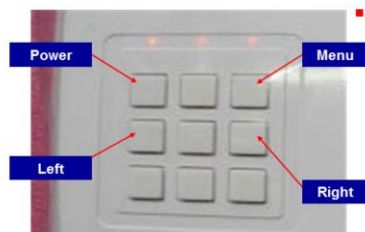
# Basic Points about Service

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No additional notes

## ■ Entering Service Mode

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- Press "Power", "Left", "Right" and "Menu" sequentially to get into service mode.
  - Note: You can use the remote controller for this.

This is slightly different from the Antares-PJ1.

## LED Display



- The status of the three LEDs on the front panel indicate the machine's condition.
  - See the table 'LED Display' in the Troubleshooting section of the service manual.

No additional notes

- After replacing parts, some adjustments may be needed. See the table below.
  - Whenever you replace a component, check this table to see if you have to do any of these procedures. The text in the Replacement and Adjustments procedures does not always refer to this table.

Update	Change parts					
	Main board	Firmware	Lamp module	Optical Engine	Lamp driver	Blower
Version update	V	V				
ADC calibration	V	V				
Reset lamp hours			V			
OSD reset	V	V				
Rod adjustment				V		
Waveform download					V	
FAN RPM calibration	V	V				V

OSD: On Screen Display

Differences from Antares:

The following adjustments are removed: Color wheel index, rewrite lamp hours

## ■ Replacing the Main Board

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- There is no 'Rewrite Lamp Hours' function.
- So, if you replace the main board, keep a note of the lamp hours first, so that you have a record of lamp usage in order to replace the lamp at the correct time.

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No additional notes



OSD Reset (1)

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Main Menu

Sub Menu

Settings

Image Adjustment

Contrast

Brightness

Color Saturation

Sharpness

Noise Reduction

Picture Mode

R-level

G-level

B-level

RGB Input Range

Auto Set

Position

0

0

0

0

Off

Standard

0

0

0

Auto

Execute

Execute

MENU

Close

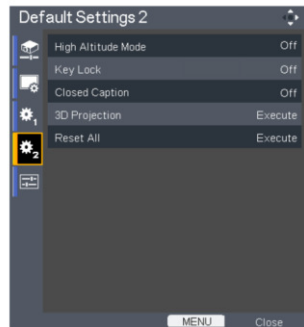
To access the OSD menu, press the Menu button (operation panel or remote controller).

The orange square on the left side of the display shows which section of the main menu is selected. The sub menu shows which items are in this section of the main menu.

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This is not explained in the service manual, so we explain it here.

## OSD Reset (2)



- In the main menu, select Default Settings 2.
- Then select Reset All and Execute.
- This returns all adjustments and settings to the factory settings.

No additional notes



No additional notes

## ■ Updating the System Firmware - 1

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- Equipment needed
  - Software
    - DLP Composer Lite
    - Firmware (\*.img)
    - Flash device parameters [Different from Antares-PJ1]
  - Hardware
    - Projector
    - Power Cord
    - RS232 Cable
      - Antares-PJ1 uses a USB cable
    - PC or Laptop

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The detailed procedure is in the Update- Firmware Update section of the service manual.

## ■ Updating the System Firmware - 2

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- Preparation
  - Install DLP Composer Lite
  - Enter the Firmware Update Mode
    - Hold the "Power" button and plug in the power cord.
    - The Power/Lamp/Temp LEDs will light red after around 10 seconds, then release the "Power" button.
  - Connect the Projector to the PC
    - Use an RS232 cable
- Update the firmware
  - Use DLP Composer Lite.
    - The procedure takes several minutes.
  - When "Download completed" appears on the screen:
    - Unplug the RS232 cable and power cord.
    - Plug in the power cord, then restart the projector and get into Service mode to check the system firmware version.

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No additional notes



The End