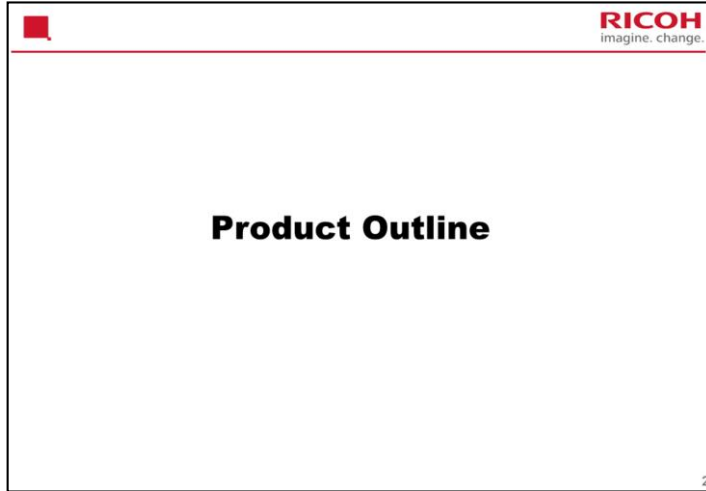This course explains how to service the Merak-PJ1 short-throw projector.

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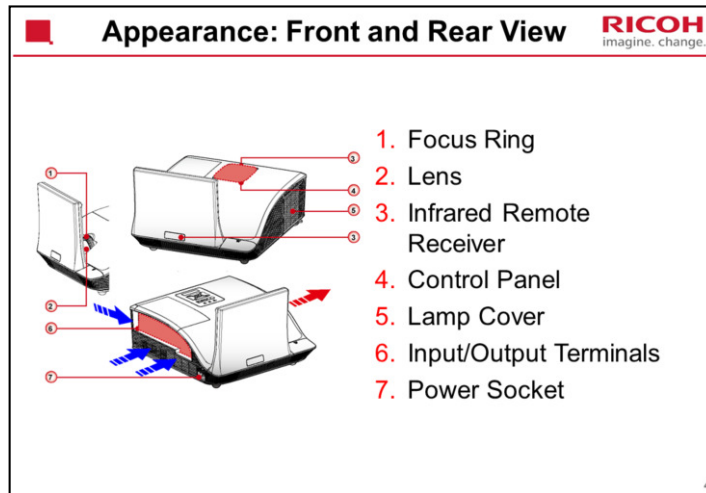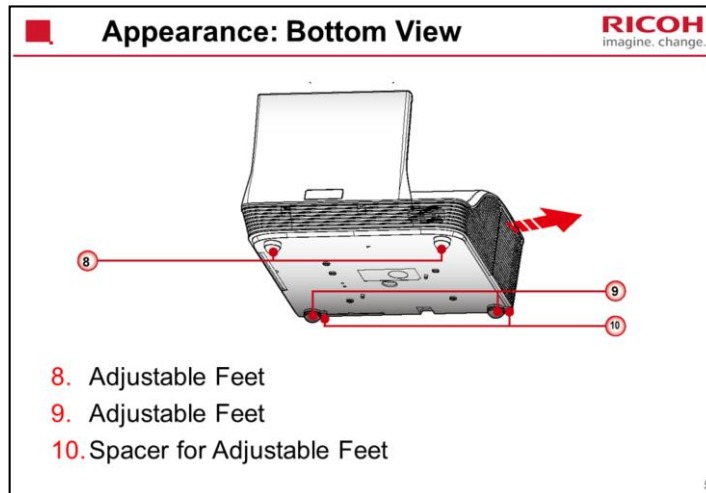
Product Outline

No additional notes

- Merak-PJ1: PJ U3000
  - Brightness: 2700lm (typical)
  - Network function available
  - Single DLP type: 0.55"
  - Projection distance: 0.52m~0.8m
  - Lens: F#2.6 f=5.27mm
  - Lamp: High-pressure mercury lamp (280W)
    - ECO: 230W
  - Speaker: 10W (Mono)
  - Screen size: 60 - 90 inch
  - Resolution: 1024 x 768 pixels (XGA)
    - Other resolutions possible but may result in some loss of image clarity.
  - Lamp Life: 3000 hours typical (Full Mode), 4000 hours typical (ECO Mode)
  - Firmware update only via USB port
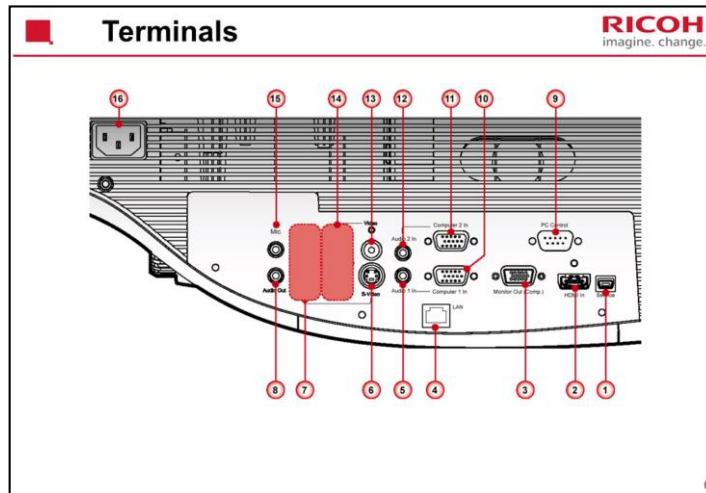 - Power consumption: 350W (290W in ECO mode)
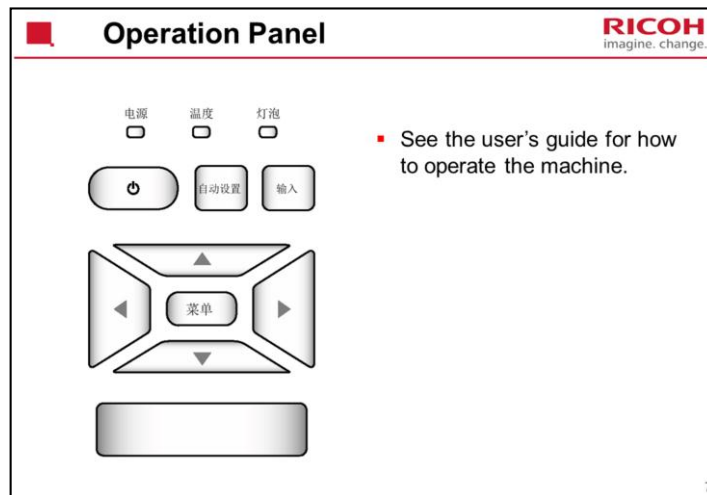
3

No additional notes

Appearance: Front and Rear View

1. Focus Ring
2. Lens
3. Infrared Remote Receiver
4. Control Panel
5. Lamp Cover
6. Input/Output Terminals
7. Power Socket

The red and blue arrows show the flow of air.500 hours of use (if the area is dusty, it should be done more often)

Appearance: Bottom View

8. Adjustable Feet
9. Adjustable Feet
10. Spacer for Adjustable Feet

No additional notes

Terminals

1. Service Connector
2. HDMI Connector
3. Monitor Output Connector
4. LAN Connector
5. Audio 1 In Connector For Computer 1 In
6. S-Video Connector
7. Audio In Connector (for S-Video)
8. Audio Out Connector
9. PC Control Connector
10. Computer 1 In Connector
11. Computer 2 In Connector
12. Audio 2 In Connector For Computer 2 In
13. Video Input Connector
14. Audio In Connector (For Video)
15. Microphone Input Connector
16. AC In Socket

No additional notes

No additional notes

Options   RICOH
imagine. change.

- Y224: Replacement Lamp Type 17 (280W)

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No additional notes

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- Follow the procedures in the user's guide when turning the power on or off.

10

No additional notes

Maintenance

No additional notes

After Replacing Parts

- After replacing certain parts, adjustments must be made as shown in the following table.
  - Example: After replacing the main board, update the firmware, do ADC calibration, OSD Reset, and Fan Calibration
  - For details of each adjustment: Service Manual > Replacement and Adjustment > Repair Action

	Main Board	Firmware	Lamp Module	Engine Module	Lamp Driver	Fan
Version Update	Yes	Yes				
ADC Calibration	Yes	Yes				
Reset Lamp Hours			Yes			
OSD Reset	Yes	Yes				
Waveform Download					Yes	
Fan Calibration	Yes	Yes				Yes

Lamp replacement is normally done by the user. The procedure is in the user guide.

The lamp hours reset procedure is as follows.

Main menu > Options > Lamp Settings > Clear Lamp Hours

Service Mode

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- Press Power > Left > Left > Menu sequentially on the remote controller or on the top panel to get into service mode.
  - For a list of the service functions and their purposes: Service Manual > Troubleshooting > Service Menu Explanation

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No additional notes

No additional notes

No additional notes

The End