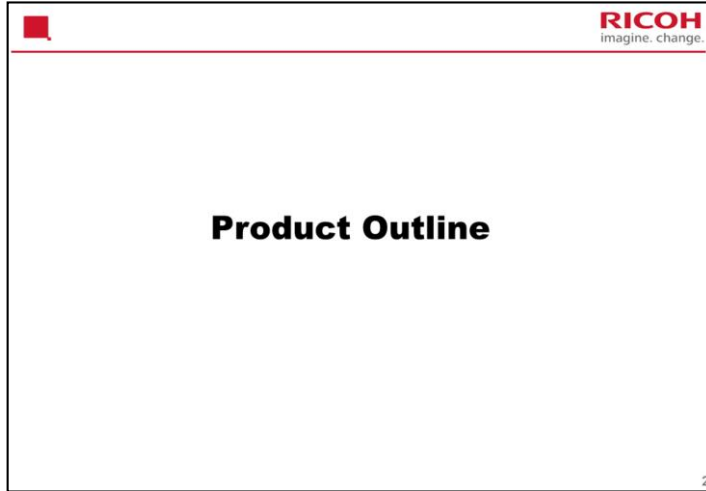




This course explains how to service the Merak-PJ1 short-throw projector. To learn about this machine, please study the user's guide and the field service manual in addition to this TTP.

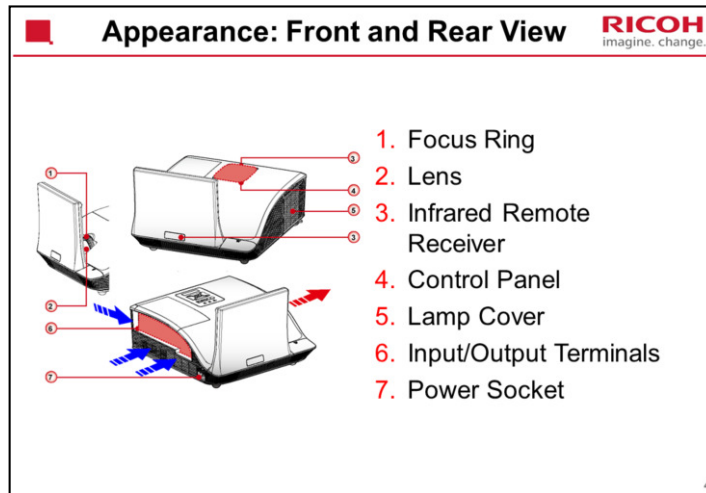


No additional notes

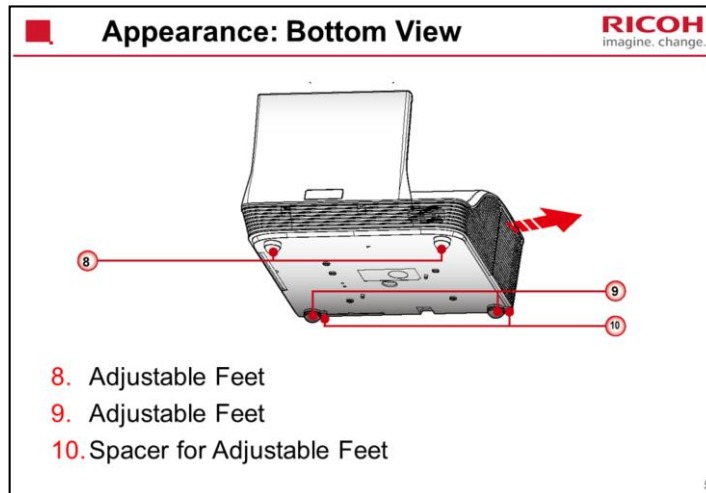


- Merak-PJ1: PJ U3000
  - Brightness: 2700lm (typical)
  - Network function available
  - Single DLP type: 0.55"
  - Projection distance: 0.52m~0.8m
  - Lens: F#2.6 f=5.27mm
  - Lamp: High-pressure mercury lamp (280W)
    - ECO: 230W
  - Speaker: 10W (Mono)
  - Screen size: 60 - 90 inch
  - Resolution: 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)

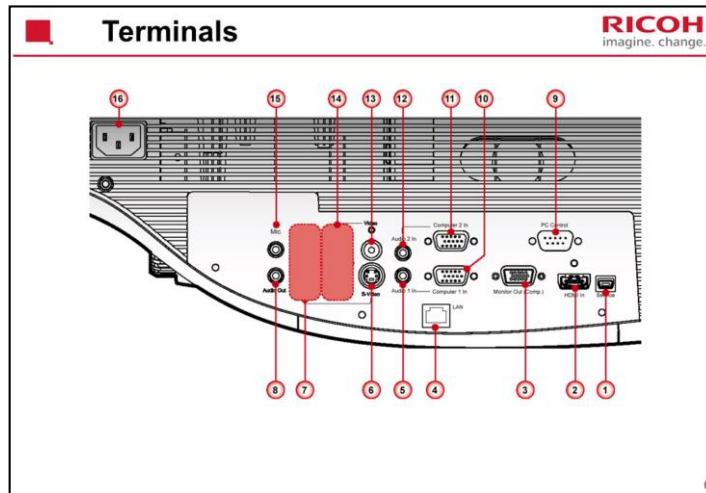
No additional notes



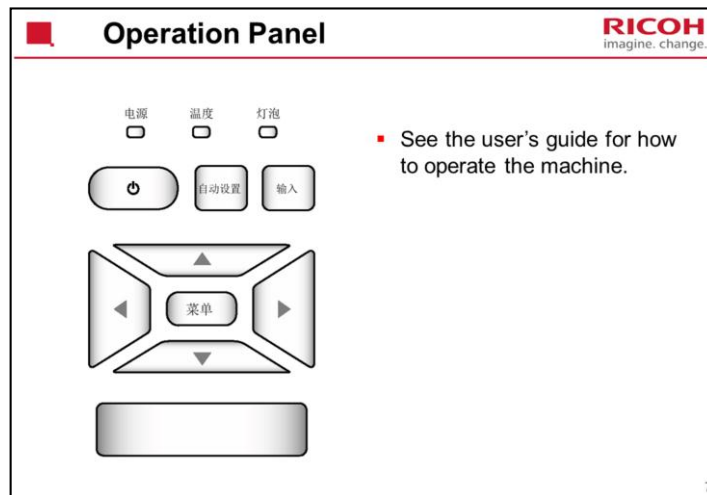
The red and blue arrows show the flow of air. 500 hours of use (if the area is dusty, it should be done more often)




No additional notes




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



# Remote Control





- For details, see the user's guide.

8

No additional notes





## Options

**RICOH**  
imagine. change.

- Y224: Replacement Lamp Type 17 (280W)

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No additional notes



## Turning Power On and Off

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


10

No additional notes



No additional notes


**After Replacing Parts**


  
imagine. change.

- 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

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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



## Updating the Firmware - 1

**RICOH**  
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- The full procedure is in this section of the service manual.
  - 4. System Maintenance > SYS Firmware Upgrade Procedure
- Here is a summary.
  - Install DDP442X Firmware Downloader in a portable PC.
  - Unplug the projector from the power source.
  - Hold the "Menu" button and plug in the power cord.
  - When the Standby LED lights orange, and the Temp and Lamp LEDs light red, release the "Menu" button.
  - Connect the projector to the portable PC with a Mini USB Cable.
  - Start DDP442X Firmware Downloader.
  - Browse for the firmware file (\*.img).
  - Update the firmware.

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No additional notes

Updating the Firmware - 2

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MCU A08 On < 280W-WXGA >

PT-CW330-A14 < Oct 15 2012-15:32 >

Lamp Hour-Full 0

Lamp Hour-ECO 0

Operating Hour 0

Lamp On/Off Counter 4/2

Lamp Voltage / Max 65 / 65 V

y067k0105

▪ After updating the firmware, check the firmware version (at the top of the service mode screen).

– MCU A08: Shows the present MCU firmware version.

– PT-CW330: Indicates the model name.

▪ This is a different model from the Merak-PJ1, but the appearance of the menu is the same.

– < Oct 15 2012-15:32>: Date and time of build code

No additional notes

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The End