



This training course provides service technician training for the Sirius-PJ2 series.

This course is for technicians who are familiar with the Sirius-PJ1, and only contains information on differences between the PJ1 and PJ2.

This course will cover information related to service. To understand the features of the machine, the correct ways to turn the projector on or off, about power saving modes, and other matters that are related to operation, please study the user guide.



This section provides an overview of the machine, and the options that can be installed.

■ What Models are there in the Series? **RICOH** imagine. change.

- Sirius-PJ2 nx (Y076): PJ X6181N
 - 7200 lumens, XGA resolution
- Sirius-PJ2 nw (Y077): PJ WX6181N
 - 6700 lumens, WXGA resolution
- Sirius-PJ2 nwu (Y078): PJ WU6181N
 - 6200 lumens, WUXGA resolution

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These are brighter than the Sirius-PJ1 models, and a WUXGA model has been introduced into this series.

■ What Type of Projectors?

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- These are high power, high image quality projectors for auditoriums and large lecture halls (100-300 persons).
- These models can be used over a network.
 - Advanced networking features can connect quickly to a LAN
 - Can project from a PC with wired or wireless network
 - Management and control using Crestron, AMX, or PJLink software

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@Remote is not supported.

Specifications Compared with Sirius-PJ1			RICOH imagine. change.		
	Sirius-PJ1		Sirius-PJ2		
	nx	nw	nx	nw	nwu
Type	LCD		LCD		
Brightness	6000lm	5500lm	7200lm	6700lm	6200lm
Resolution	XGA	WXGA	XGA	WXGA	WUXGA
Contrast	2000 : 1		6000 : 1		
Dimension (W × D × H)	499 × 359 × 144		499 × 359 × 142		
Weight (excluding lens)	7.7kg		8.4kg		
Power	464W		483W		
Keystone	Vertical/Horizontal		Vertical/Horizontal		
Speaker	10W x 1		10W x 1		
Wireless LAN	Option		Option		
Wired LAN	Yes		Yes		
USB	Yes		Yes		
HDMI	Yes		Yes (x2)		

Items in red show the main improvements.

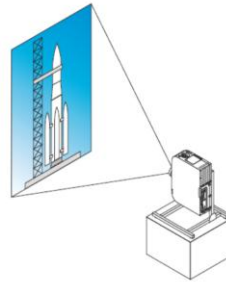
An additional HDMI has been added, but analog input has been removed.

See the appendix of the service manual or the user guide for a more complete list of specifications.

Other New Features

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- Portrait mode
 - This mode will add more solutions for cases such as projection mapping and digital signage.
 - Lamp life is reduced to 2000 hours if used exclusively in this mode.
 - Cannot use this mode if the lamp has already been used for 1900 hours or more.
 - [FAN MODE] must be set to [AUTO].
- 4k input signals are supported



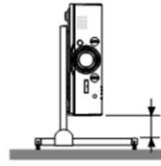
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See 'Portrait projection' in the user manual for about this mode.

For portrait projection, the power supply will be switched off when the estimated lamp replacement time is reached.

■ Installing the Machine for Portrait Mode

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- It is OK to install the machine vertically using a custom-made stand. However, do not tilt the machine at an angle less than 90 degrees.
- Install the projector with the intake vent at the bottom and leave a space of at least 130 mm below the intake vent.

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No additional notes

■ Low Energy Consumption

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- 4,000 hour lamp life and lower power consumption in Eco mode (same as Sirius-PJ1)
 - The life of 4,000 hours is only achieved if the lamp is always used in Eco mode.
 - Lamp power in Eco mode is 80% of full power.
- Power consumption values:
 - Eco Mode Off (Normal): 483 W (100-130 V), 460 W (200-240 V)
 - Eco Mode: 377 W (100-130 V), 362 W (200-240 V)
 - Standby (Network Standby): 4.7 W (100-130 V), 4.9 W (200-240 V)
 - Standby (Power saving): 0.11 W (100-130 V), 0.16 W (200-240 V)

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No additional notes

■ Consumables and Options

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- Replacement lamp type 21 (Y227)
 - Different from Sirius-PJ1 (a brighter lamp is needed)
 - Life: 3000 hours (normal mode), 4000 hours (Eco mode), 2000 hours (Portrait mode)
 - There may be a 50% decrease in brightness at the end of the lamp's life.
- Lenses
 - Standard Lens Type 1 (Y101)
 - Replacement Lens Types 1 to 4 (Y102/Y103/Y104/Y105)
 - Replacement Lens Type 8 (Y134): Not used in Sirius-PJ1
 - Same as Replacement Lens Type 1 but with zoom (x1.3) added
- Wireless LAN unit (Y106)
 - IEEE 802.11b/g/n are supported

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Wireless LAN Unit M1: For USA, Canada, Mexico, Brazil, Colombia, and Taiwan

Wireless LAN Unit M2: For CE Countries (27 EU countries, and Iceland, Liechtenstein, Norway, and Switzerland), UAE, Saudi Arabia, Oman, South Africa, Turkey, Egypt, Israel, Australia, NZ, Thailand, HK, Singapore, Malaysia, Sri Lanka, Pakistan, Vietnam, India, Philippines, Peru, Chile, Argentina, Ecuador

Wireless LAN Unit M3: For Russia

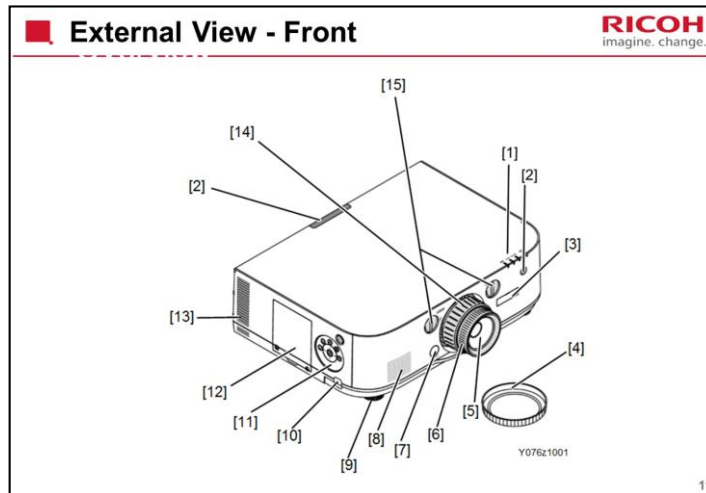
■ Reliability Information

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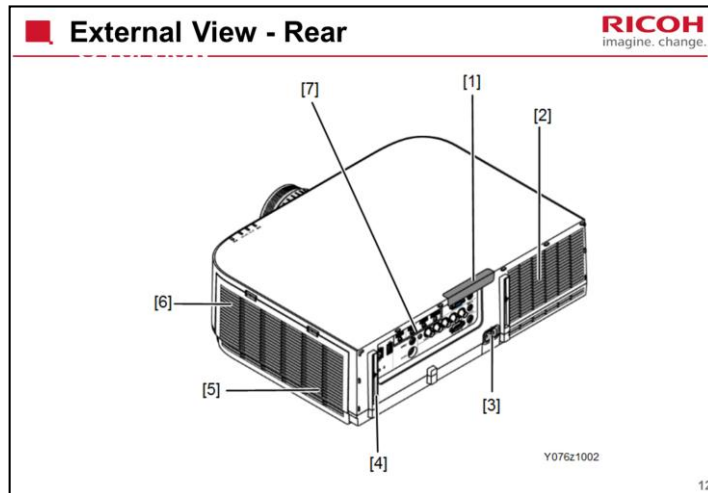
- Average monthly projection time: 58.3 hrs/month
 - 2.65 hrs/day x 22 working days/month
- Failure Rate
 - 1st year: 0.00166 cases/unit/month
 - 2nd year: 0.00184 cases/unit/month
 - 3rd year: 0.00222 cases/unit/month
 - 4th year: 0.00247 cases/unit/month
 - 5th year: 0.00250 cases/unit/month
- Lamp Life
 - Normal Mode: 3,000 hrs
 - Eco Mode: 4,000 hrs
 - Portrait Mode: 2,000 hrs

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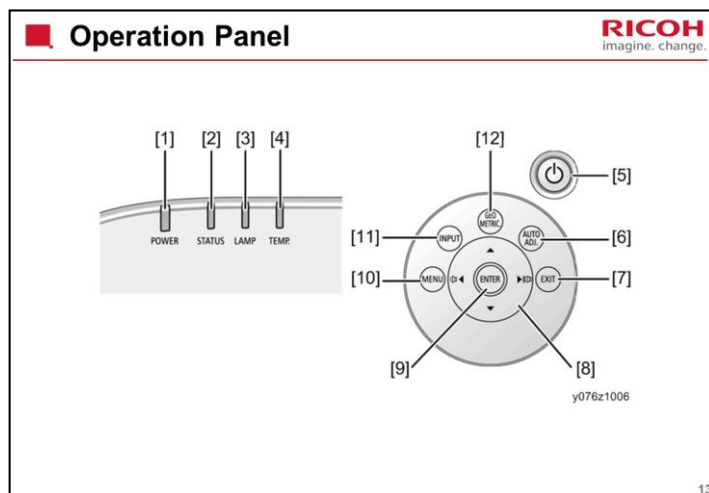
The failure rate of a projector increases with its total power-up time. This is due in part to the failure characteristics of optical engines in projectors.



1. Indicator Section
2. Remote Sensor (front and rear)
3. Securing lever cover
4. Lens Cap (The optional lens is shipped with the lens cap.)
5. Lens
6. Focus Ring
7. Lens Release Button
8. Monaural Speaker (10 W)
9. Adjustable Tilt Foot
10. Security Bar
11. Controls
12. Lamp Cover
13. Exhaust vent
14. Zoom Lever/Zoom Ring
15. Lens Shift Dial (vertical/horizontal)

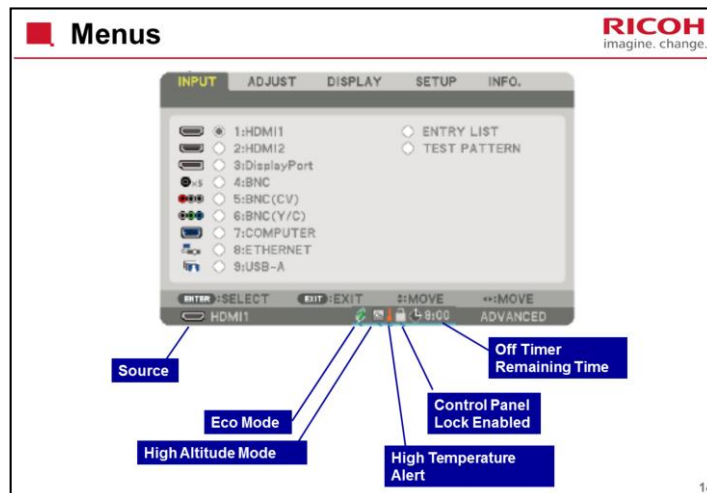


1. Remote Sensor (located on the front and the rear)
2. Exhaust vent
3. AC IN Terminal
4. Built-in Security Slot
5. Intake vent / Filter Cover
6. USB (LAN) Port: This is inside the projector.
7. Terminals



For details: Service manual > 1. Product Information > Overview

8. The left and right arrow buttons can be used to adjust the speaker volume.



This slide shows the Input Menu, and explains the symbols that appear on the menu screen.

The menu system is similar to the Sirius-PJ1, but the contents are not exactly the same. See '5. Using On-Screen Menu' in the user manual for full details of the user menus.

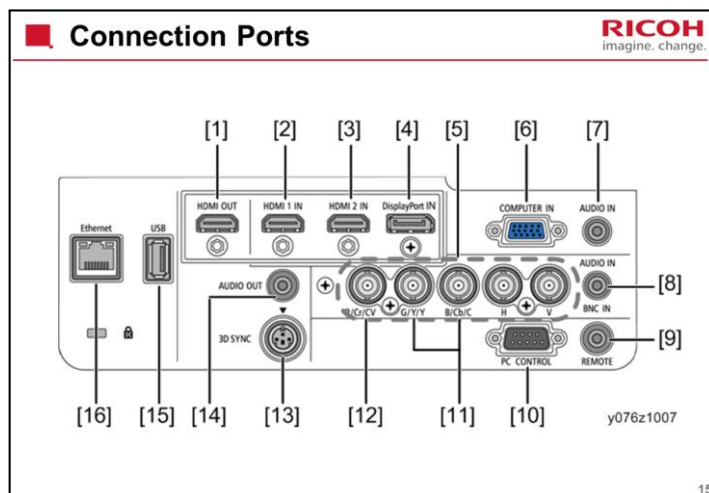
For details of all functions, see the user's manual.

High Altitude Mode: The fans operate at a higher speed in this mode. Use this when the projector's location is more than 1500 m (5500 ft) above sea level (otherwise, the projector could overheat and shut down automatically). If you use Eco Mode, also use High Altitude Mode if the projector's location is more than 1000 m (3200 ft) above sea level.

Also, if you use high altitude mode at less than 1500 m (5500 ft) above sea level, the projector could become too cool, causing images to flicker. Switch [FAN MODE] to [AUTO].

High Temperature Alert: High temperature detected inside the projector, Eco Mode is enforced

If the projector overheats, it shuts down automatically. Wait a few moments then turn back on again.



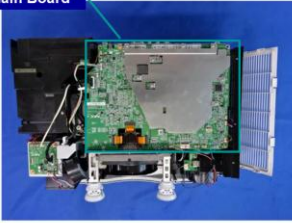
1. HDMI OUT Connector (Type A)
2. HDMI 1 IN Connector (Type A)
3. HDMI 2 IN Connector (Type A)
4. DisplayPort IN Connector
5. BNC Input Connectors (BNC × 5)
6. COMPUTER IN/ Component Input Connector (Mini D-Sub 15 Pin)
7. COMPUTER AUDIO IN Mini Jack (Stereo Mini)
8. BNC AUDIO IN Mini Jack (Stereo Mini)
9. REMOTE Connector (Stereo Mini): Not used
10. PC CONTROL Port (D-Sub 9 Pin)
11. BNC (Y/C) Input Connector (BNC × 2)
12. BNC (CV) Input Connector (BNC × 1)
13. 3D SYNC Connector (Mini DIN 4 Pin)
14. AUDIO OUT Mini Jack (Stereo Mini)
15. USB-A Port (Type A)
16. Ethernet Port (RJ-45)

Location of Main Units

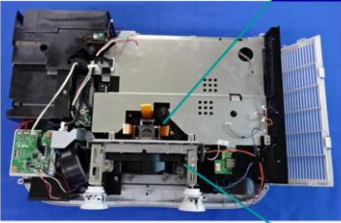
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Main Board



Engine Unit



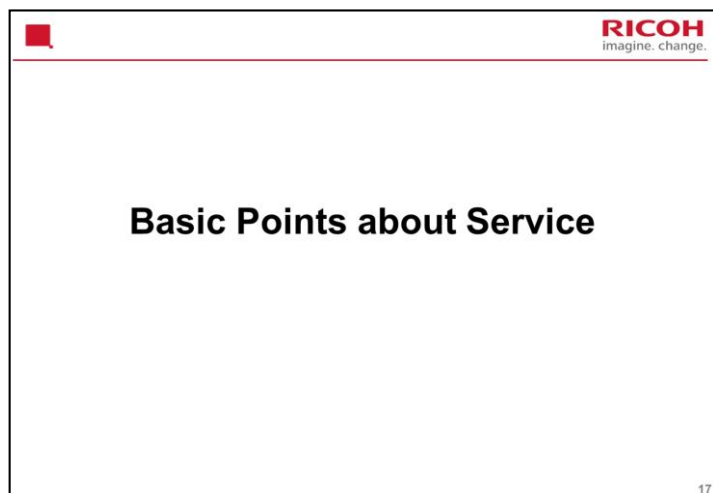
OPT BASE



- After removing the top cover, you see the main board.
- This board must be removed to access the adjustments.
- After you remove the main board, you can see major subassemblies as shown on the right.

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The layout is very similar to the Sirius-PJ1.



This section explains the basic points about servicing the machine. It is basically the same as Sirius-PJ1.

- An Iris unit has been added as a service tool for Sirius-PJ2 (part number: Y0783111).
- However, if you wish, you can use the Iris unit from inside the projector instead, in the same way as for the Sirius-PJ1.

Service manual: 3. Replacement and Adjustment > Special Tools

- The way to enter and exit service mode is the same as Sirius-PJ1.
 - The Back button has been changed to an Exit button (in the same place on the remote controller).

No additional notes



This section explains the most important points about adjustments that are needed after replacing components.

The procedures are almost exactly the same as for the Sirius-PJ1.

The optical adjustments are also almost exactly the same as the Sirius-PJ1 (details of the procedure, and when to do them).

- The procedures after replacing the main board and the OPT BASE are almost exactly the same as for the Sirius-PJ1.
- The optical adjustments are also almost exactly the same as the Sirius-PJ1 (details of the procedure, and when to do them).

No additional notes

- Model-Specific Data Writing Procedure: The procedure is similar to Sirius-PJ1, except for the following.
 - Number of files to upload to the Sirius-PJ2 is 3, instead of 2.
- Service adjusting software
 - The file name of the software is: Ser_WU6181NSeries(1.0.0)
 - Install it and operate it as described in the service manual.
 - 3. Replacement and Adjustment > Electrical Adjustment > PC control software for service
- Other differences:
 - The PC used for writing data to the projector and doing the service procedures must have Windows Vista or Windows 7.
 - The software for writing serial number and model number data is now called SNWriter2.

No additional notes



The End