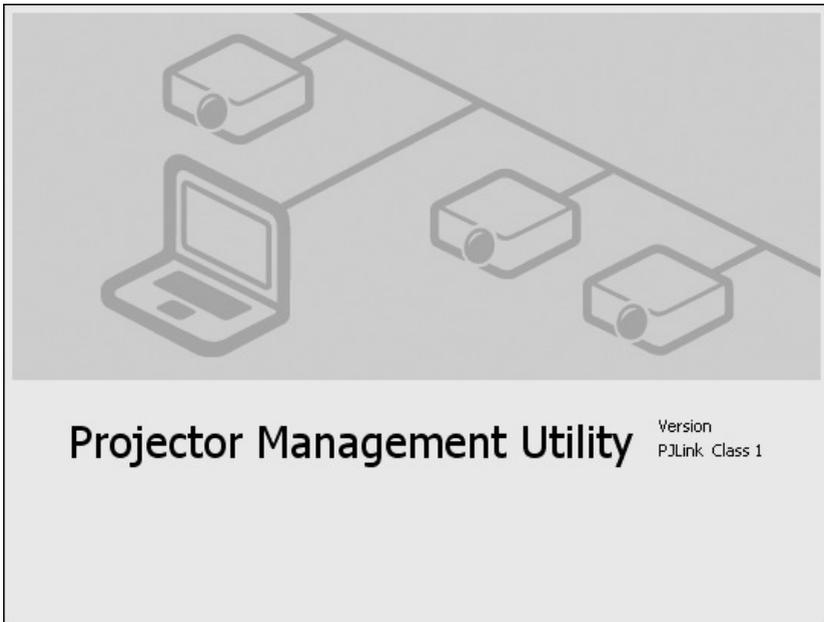


# RICOH

## PROJECTOR MANAGEMENT UTILITY MANUAL

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- This Projector Management Utility is designed to run on Windows 2000®, Windows XP®, Windows Vista®, and Windows® 7. It will not run on Macintosh.
- This manual has been written assuming that you have sufficient knowledge of basic Windows® operations. About how to operate the personal computer that the Projector Management Utility is running on, refer to the instruction manual for your personal computer.
- This manual describes how to install the Projector Management Utility and provides a brief explanation of how to use it. For more details about operating instructions, refer to the Help of the Projector Management Utility.

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## IMPORTANT PRECAUTIONS

**You should read this first before you use this software.**

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## BEFORE USING

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### ■ About PJLink

Network projectors permit easing of installation site and distance constraints. They offer much convenience, enabling customers to concurrently control and monitor multiple projectors.

However, the network projectors may not be effectively utilized in a large scaled system or the like where manufacturer-specific control systems and commands conventionally allow a projector to be controlled only by the software application provided by the same manufacturer who made the projector. Some users may even have to develop a complex control software application on their own.

To remove such barriers between manufacturers and to promote standardization of controlling protocols for network projectors, JBMIA has launched the PJLink Class 1. Network projectors of different models or provided by different manufacturers can be controlled and monitored using the same software application, assuming they are PJLink – compliant.

This projector and software application package “Projector Management Utility” are fully compliant to the specifications of JBMIA PJLink Class 1. They support all the commands defined by PJLink Class 1, and the compliance has been verified with the PJLink standard specifications Version 1.0.

With PJLink, multiple projectors (100 units maximum) used in classrooms, meeting rooms, etc., can be controlled and their operating state can be monitored via network connections.

# INSTALLING SOFTWARE APPLICATION

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Install the software application on your personal computer from the supplied CD-ROM.

## ■ System Requirements

Operating system: Windows® 2000, Windows® XP, Windows Vista® (Ultimate, Business), Windows® 7 (Professional, Ultimate)

CPU: Pentium III 1 GHz or higher recommended

Memory: 256 MB or more

Monitor display (screen resolution): 800 × 600 pixels or higher

## ■ Main Features

You can control up to 100 networked projectors from one computer via LAN.

You can control network projectors provided by other manufacturers, assuming they are PJLink – compliant.

### ■ Note

- The controllability may vary depending on the manufacturer. For details, refer to the instruction manual supplied with the equipment.

## ■ Installation

Double-click **setup.exe** in the **Projector Management Utility** folder on the supplied CD-ROM. Follow the on-screen instructions. When installation is finished, a shortcut icon is created on the desktop screen of the computer.



## ■ Uninstallation

Uninstall [**RICOH Projector Management Utility**] program by using a program removal utility found in the [**Control Panel**] on your computer.

## ■ Updates

For the latest information on this software application, please access the support information on Ricoh Web site at the URL; <http://www.ricoh.com/>.

### ■ Note

- To install or uninstall the software application, log on to the computer as an Administrator.

# PROJECTOR SETTINGS

Set the items of [Wireless LAN], [Wired LAN], [Projector name] and [PJLink] by selecting the [Setting up the Network Projector/Network Utility] menu and [Control setting] menu on the projector. As for details of [Wireless LAN], [Wired LAN] settings, refer to the instruction manual supplied with the projector.

## ■ Setting up the Network Projector/Network Utility

Category	Item ▲▼	Description
Wireless LAN	LAN settings	Mode: Ad hoc ◀ ▶ Infrastructure
		SSID: Specify a desired character string (1 to 32 characters). [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
		DHCP: Use ◀ ▶ Not use
		IP address: Enter using the numeric keys of the remote control. [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
		Subnet mask: Enter using the numeric keys of the remote control. [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
		Gateway: Enter using the numeric keys of the remote control. [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
	Confirm: [OK] ◀ ▶ [Cancel] → [Enter: ⏎]	
	Security	Network authentication: Network Authentication Setting [◀ ▶] or [▶]: Enter setting mode → [▲ ▼] : Selection → [Enter: ⏎] None/Open/Shared/WPA-PSK/WPA2-PSK
		Encryption: Select an encryption type with ◀ ▶ button. Off/WEP/TKIP/AES
		Key index: Select a desired number (1 to 4) using the ◀ ▶ buttons.
Network key: Specify a desired character string. (WEP: 5 to 13 characters, or 10 to 26 digits in hexadecimal notation) (TKIP/AES: 8 to 63 characters, or 64 digits in hexadecimal notation) [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]		
Confirm: [OK] ◀ ▶ [Cancel] → [Enter: ⏎]		
Setting initialization	Reset all the wireless LAN settings. Confirm: [Yes] ◀ ▶ [No] → [Enter: ⏎]	
Wired LAN	LAN settings	DHCP: Use ◀ ▶ Not use
		IP address: Enter using the numeric keys of the remote control. [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
		Subnet mask: Enter using the numeric keys of the remote control. [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
		Gateway: Enter using the numeric keys of the remote control. [◀ ▶]: Move left or right one character.   [↔] [ ] to [wkr]: Set a character.]
	Confirm: [OK] ◀ ▶ [Cancel] → [Enter: ⏎]	

## PROJECTOR SETTINGS (Continued)

### ■ Control setting

Item ▲ ▼	Description
 <b>Projector name</b>	Specify a desired character string (0 to 16 characters). [◀ or ▶: Enter setting.] → [◀ ▶: Move left or right one character.] → [⏏] to [wxyz]: Set a character.] → [✔: Confirm] → [◀ ▶: Select OK to end] Press [Cancel] to return.
 <b>PJLink</b>	[◀ ▶: PJLink setting] → [▲ ▼: Select item]
 <b>PJLink authentication: On ▶ Off</b>	
 <b>Password:</b>	Enter a character string (1 to 32 characters) using numeric keys of the remote control.
	<b>Confirm:</b> [OK ▶ Cancel] → [⏏]
 <b>Wireless network</b>	[◀ or ▶: Enter setting.] → [◀ ▶: Select from Enabled, Disabled] → [✔: Confirm] → [◀ ▶: Select OK to end] Press [Cancel] to return.

#### [PJLink]

<**PJLink authentication**>: Set whether or not to authenticate the user by password when the projector is accessed via the PJLink-compliant software application. (Set [**On**] or [**Off**].)

<**Password**>: Enter a password for confirmation when the above <**PJLink authentication**> is set to [**On**].

### ■ Precaution

- When purchased, <**PJLink authentication**> is set to [**Off**] and <**Password**> is not set by factory setting. You are recommended to make authentication setting as soon as possible.
- If you forget a password, set it again.

### ■ Note

- When using PJLink-compliant projectors provided by other manufacturers, be sure to configure the settings such as TCP/IP correctly in accordance with the instruction manual supplied with the projector.

## ■ Character entry

Enter characters using numeric keys of the remote control.

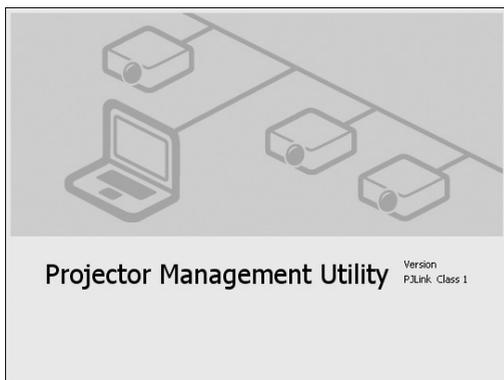
The character is entered with a beep sound if the beep sound is set to [On].

	Character entry mode	
Remote control button	Items using characters, numbers, and symbols (e.g., projector name and password)	Number only
	"1" " ." "@ " "_ " "_ "	"1"
	"2" "A" "B" "C" "a" "b" "c"	"2"
	"3" "D" "E" "F" "d" "e" "f"	"3"
	"4" "G" "H" "I" "g" "h" "i"	"4"
	"5" "J" "K" "L" "j" "k" "l"	"5"
	"6" "M" "N" "O" "m" "n" "o"	"6"
	"7" "P" "Q" "R" "S" "p" "q" "r" "s"	"7"
	"8" "T" "U" "V" "t" "u" "v"	"8"
	"9" "W" "X" "Y" "Z" "w" "x" "y" "z"	"9"
	"0" "space!"#\$%&'()*+,-./:;<=>?@[ \ ] ^ _ ` {   } ~"	"0"
	Deletes one character.	Deletes one character.

# STARTING THE SOFTWARE APPLICATION

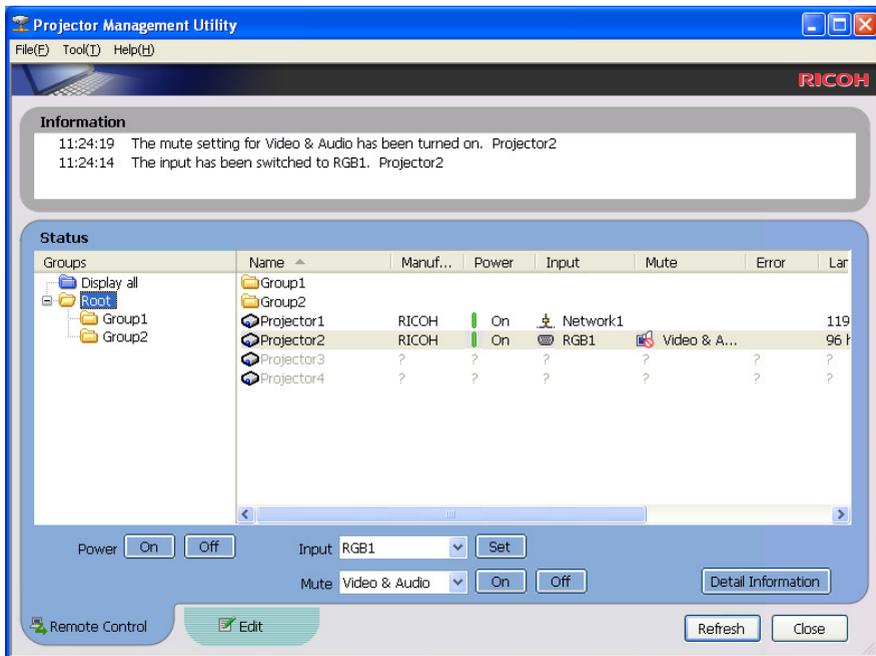
Start the software application [Projector Management Utility]. For operating instructions, refer to the Help of the [Projector Management Utility].

## [The Start window]



- When startup, the projector registration information is acquired from the setting file.

## [Main window]



- First, you need to register the projector which you want to control and monitor.

- A list of successfully connected projectors (groups) is displayed, indicating Projector [Name], [Manufacturer], [Power], [Input], [Mute], [Error], [IP Address], and [Group Path] of the connected projectors. [X] will appear where connections failed due to incorrect password or other reasons, while [?] indicates a communications error.
- You can use the mouse to select a single group or projector, or use the mouse while holding down the Shift or Ctrl key to make multiple selections.
- The functions operational from the Projector Management Utility are Power On/Off, Input Selection, and Mute.
- The projector will not change to the input selected by the Projector Management Utility, if not support it.
- The projector will not change to the Mute function (Picture, Sound, or Picture & Sound) selected by the Projector Management Utility, if not support it.

### Note

- The correspondence between Input Number and Input Name is shown below:

Ricoh Projector Input Name	PJLink Input Name
Computer 1	RGB 1
Y/P <sub>B</sub> /P <sub>R</sub> 1	RGB 2
Computer 2	RGB 3
Y/P <sub>B</sub> /P <sub>R</sub> 2	RGB 4
HDMI	Digital 1
Video	Video 1
S-Video	Video 2
Network	Network 1
USB memory	Storage 1

- Ricoh Projector does not support the following Mute functions: Picture only and Sound only.
- As for details of the projectors provided by other manufacturers, refer to the instruction manual supplied with the projector.
- When using the **Projector Management Utility** under Windows Vista® or Windows® 7, you must login as an administrator, or enter the password used at start up by a user with administrator's permissions.