

RICOH Stereo Camera Software R-Stereo-GigE-Package

User's Guide

RICOH Industrial Solutions Inc.

RICOH Contents

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1. Software Components

- 1.1 R-Stereo-GigE-Package consists of the following software.
 - R-Stereo-GigE-Player
 eBUS Universal Pro Driver
 R-Stereo-GigE-SDK
 R-Stereo-GigE-Calibration

The instruction manual for each software is installed under "Start" - "All Programs" - "R-Stereo-GigE-Package X.X.X.XX" - "Doc."



2. Software Overview

2.1 The following provides an overview of each software.

R-Stereo-GigE-Player	Application for capturing images from a stereo camera and displaying them in real time.	
eBUS Universal Pro Driver	Driver for capturing images from the stereo camera.	
R-Stereo-GigE-SDK	Software development kit (SDK) containing the programs and documents required to develop software for the stereo camera and lighting.	
R-Stereo-GigE-Calibration	Application for calibrating the stereo camera.	

3. Operating Conditions

3.1 The following shows the recommended operating conditions for this software.

OS	Windows [®] 7 Professional (32-bit/64-bit)*
CPU	Intel Core i5 2.7 GHz or faster
Memory	4 GB or more
HDD	At least 1 GB of free space
LAN port	1 Gigabit Ethernet port
Network	Support for jumbo frames of 9 KB or larger
adapter	

* Windows is a trademark or registered trademark of Microsoft Corporation in the United States.



4. Installation Procedure

- 4.1 Installing R-Stereo-GigE-Package
- 4.1.1 Save R-Stereo-GigE-Package-Setup.X.X.X.XX.exe in any folder and then run it.
- 4.1.2 When the language selection dialog box opens, select either "日本語" or "English." After making the selection, click the OK button.

4.1.3 Click the Next button.





4.1.4 Select "Agree" and then click the Next button.

icense Agreement Please read the following important	t information before continuing.
Please read the following License A agreement before continuing with f	greement. You must accept the terms of this the installation.
By installing and using this softwar	e you agree to the EULA below:
etc.	
 I accept the agreement 	

4.1.5 Specify the installation destination and then click the Next button.

	Location		
Where should R-Ste	ereo-GigE-Package 1.0.0.47	be installed?	Ċ
Setup will	install R-Stereo-GigE-Packagi	e 1.0.0.47 into the folk	owing folder.
To continue, click N	ext. If you would like to selec	ct a different folder, d	ick Browse.
C: Program Files\R	icoh (R-Stereo-GigE-Package	\1.0.0.47	Browse
At least 150.2 MB o	of free disk space is required.	ê.	

4.1.6 If you wish to create program icons in the Start menu, specify the location to create them and then click the Next button.

If you do not wish to create a program group, select the check box.

Setup - R-Stereo-GigE-Package 1.0.0.47	
Select Start Menu Folder Where should Setup place the program's shortcut	s?
Setup will create the program's shortcut	s in the following Start Menu folder.
To continue, dick Next. If you would like to select	Browse.
_	
Don't create a Start Menu folder	
	< Back Next > Cancel

4.1.7 If you wish to create shortcuts on the desktop, select the check box and then click the Next button.

Setup - R-Stereo-GigE-Package 1.0.0.47	×
Select Additional Tasks Which additional tasks should be performed?	Ð
Select the additional tasks you would like Setup to perform while installing R-Stereo-GigE-Package 1.0.0.47, then click Next. Additional icons:	2
Create a desktop icon	
< Back Next >	Cancel

4.1.8 Click the Install button to start the installation.

Setup - R-Stereo-GigE-Package 1.0.0.47	x		
Ready to Install Setup is now ready to begin installing R-Stereo-GigE-Package 1.0.0.47 on your computer.	ð		
Click Install to continue with the installation, or click Back if you want to review or change any settings.			
Destination location: C: \Program Files\Ricoh\R-Stereo-GigE-Package\1.0.0.47 Start Menu folder: R-Stereo-GigE-Package 1.0.0.47	*		
4			
< Back Instal C	ancel		

4.1.9 When the following dialog box appears, the installation is complete.



4.2 Installing eBUS Universal Pro Driver

4.2.1 Select "Start" - "All Programs" - "R-Stereo-GigE-Package X.X.X.XX" - "Maintenance" - "Install Driver."

4.2.2 The following dialog box appears.

Specify "Install eBUS Universal Pro Driver" for the Action item of the network adapter for connecting with the camera.

After making the selection, click the Install button.

Ş	Driver Installation Tool				x
F	ile Help				
	Network Adapter MAC	Description	Current Driver	Action	
	00:00:74:63:39:0c	Intel(R) 82577LM Gigabit Network Connect	Manufacturer	Do Nothing	1
	00:00:74:63:39:0d	Intel(R) 82574L Gigabit Network Connection	Manufacturer	Do Nothing 💌	
				Do Nothing	
				Install eBUS Universal Pro Driver	_
				Install	

A dialog box for confirming the installation of the driver software is displayed by Windows after you click "Install." Select the "Always trust software from Pleora Technologies Inc." check box and then click "Install."



The installation progress is indicated by the progress bar.



Updating Driver Configuration	
Uninstall current installed driver.	100%

4.2.3 When the Current Driver item is updated to "eBUS Universal Pro Driver," the installation is complete.

8	Driver Installation Tool				x
1	File Help				
	Network Adapter MAC	Description	Current Driver	Action	
	c	Intel(R) 82577LM Gigabit Network Connect	Manufacturer	Do Nothing	-
	b	Intel(R) 82574L Gigabit Network Connection	eBUS Universal Pro Driver	Do Nothing	•
				Instal	90

5. Windows Settings

- 5.1 Select "Start" "Control Panel" to open Control Panel.
- 5.2 Select "Hardware and Sound" "Device Manager."







5.3 When the Device Manager dialog box opens, right-click the network adapter for connecting with the camera under "Network adapters."

When the menu appears, select "Properties."

- 5.4 When the properties dialog box of the network adapter opens, select the Advanced tab. Next, select the "Jumbo Frame" or "Jumbo Packet"* item under "Property." Specify "9 KB *" or "9014 Bytes *" for the value.
 - * The indication may differ depending on the network adapter you use. You may not be able to set 9 KB. If not, set the highest value you can set.

ntel(R) 82574L G	ägabit Network	Connection	Propertie	s	×
Teaming General	VLANs Link Speed	Driver Advance	Details d Po	Reso wer Manag	urces ement
(intel)	Advanced Adap	oter Settings			
Settings:	Shun Mada		Value:		
Large Send O Locally Admini	fload (IPv4) ffload (IPv4) ffload (IPv6) stered Address	Ē	9014 By	tes	•
Log Link State Performance (Jumbo Packet	Event Options	*	U	se Default	
Enables Jum where large additional lat CPU utilizatio	bo Packet capabil packets make up ency can be toler on and improve wi	ity for TCP/IP the majority ated, Jumbo ire efficiency	packets. In of traffic an Packets ca	n situations nd n reduce	*
Jumbo Packa are approxim	ets are larger than nately 1.5k in size	n standard Et	hernet fran	nes, which	
W los	te: Changing this s of connectivity.	setting may o	ause a mo	mentary	-
			ОК		ancel

The settings are now complete.



6 Uninstallation Procedure

6.1 Uninstalling R-Stereo-GigE-Package

Note: If you also wish to uninstall the driver, perform the procedure described in "6.2 Uninstalling eBus Universal Pro Driver" before you uninstall R-Stereo-GigE-Package.

6.1.1 Select "Start" - "All Programs" - "R-Stereo-GigE-Package X.X.X.XX" - "Maintenance" - "Uninstall R-Stereo-GigE-Package."

6.1.2 When the following dialog box opens, click the Yes button.



6.1.3 When the following dialog box appears, the uninstallation is complete.





6.2 Uninstalling eBUS Universal Pro Driver

6.2.1 Select "Start" - "All Programs" - "R-Stereo-GigE-Package X.X.X.XX" - "Maintenance" - "Install Driver."

6.2.2 The following dialog box appears.

Specify "Use Manufacturer" for the Action item of the network adapter for which eBUS Universal Pro Driver is installed.

After making the selection, click the Install button.

Driver Installation Too				_
le Help				
Network Adapter MAC	Description	Current Driver	Action	[
	Intel(R) 82577LM Gigabit Network Connect	Manufacturer	Do Nothing	
	Intel(R) 82574L Gigabit Network Connection	eBUS Universal Pro Driver	Do Nothing	-
			Do Nothing	
			Use Manufacturer	
			Instal	Close

6.2.3 When the Current Driver item is updated to "Manufacturer," the uninstallation is complete.

0	Driver Installation Too	A			x
ŀ	File Help				
	Network Adapter MAC	Description	Current Driver	Action	
		Intel(R) 82577LM Gigabit Network Connect.	Manufacturer	Do Nothing	
		Intel(R) 82574L Gigabit Network Connection	Manufacturer	Do Nothing	•
0					
				Instal	llose

Revision History

Rev.	Date	Changes	Note
1.00	March 24, 2015	Newly created	

RICOH Industrial Solutions Inc.