

Vision Sensor

FH-UMLIC-08

FH Application Software

Installation Manual

FH-UMLIC-08

FH-5552/FH-5552-□□

FH-5551/FH-5551-□□



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Introduction

Thank you for purchasing the FH-UMLIC-08.

This manual contains information that is necessary to use the FH-UMLIC-08.

Please read this manual and make sure you understand the functionality and performance of the FH-UMLIC-08 before you attempt to use it in a control system.

Keep this manual in a safe place where it will be available for reference during operation.

Intended Audience

This manual is intended for the following personnel, who must also have knowledge of electrical systems (an electrical engineer or the equivalent).

- Personnel in charge of introducing FA systems.
- Personnel in charge of designing FA systems.
- Personnel in charge of installing and maintaining FA systems.
- Personnel in charge of managing FA systems and facilities.

Applicable Products

This manual covers the following products.

- FH-UMLIC-08
- FH-5552/FH-5552-□□
- FH-5551/FH-5551-□□

Part of the specifications and restrictions are given in other manuals. Refer to *Relevant Manuals* on page 2 and *Related Manuals* on page 16.

Relevant Manuals

The following table provides the relevant manuals for the upgraded FH sensor controller that uses FH-UMLIC-08.

Read all of the manuals that are relevant to your system configuration and application before you use the FH-UMLIC-08.

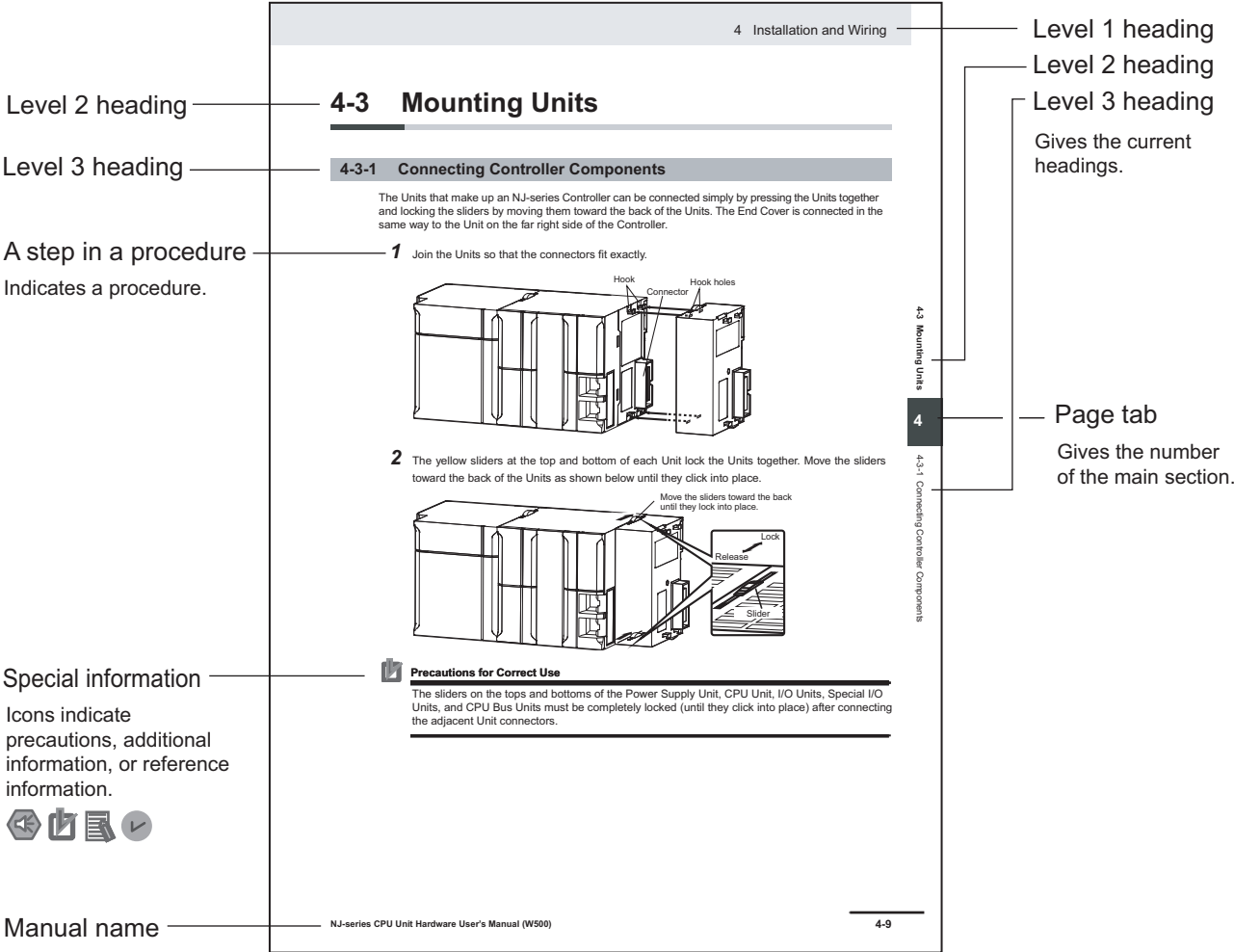
Purpose of use	Manual					
	Basic information		FH Series Vision System Hardware Setup Manual	FH-UMLIC-08 FH Application Software Processing Item Function Reference Manual	FH Series Vision System Macro Customize Functions Programming Manual	FH Series Vision System User's Manual for Communications Settings
	FH/FHV Series Vision System User's Manual	FH Series Vision System Hardware Setup Manual				
Overview of FH series	●	●				
Setup and Wiring						
EtherCAT						
EtherNet/IP						
PROFINET		●				
Ethernet						
RS-232C						
Parallel interface						
Setup the communication setting of Sensor Controller						●
EtherCAT						
EtherNet/IP	●	●			●	
PROFINET						
Ethernet						
RS-232C						
Parallel interface						
Setup the Sensor Controller						●
EtherCAT						
EtherNet/IP						
PROFINET	●				●	
Ethernet						
RS-232C						
Parallel interface						

Purpose of use	Manual					
	Basic information		FH Series Vision System Hardware Setup Manual	FH Series Vision System Macro Customize Functions Programming Manual	FH Series Vision System User's Manual for Communications Settings	FH Series Vision System Operation Manual for Sysmac Studio
	FH Series Vision System User's Manual					
Create and Set the Scene						●
EtherCAT						
EtherNet/IP						
PROFINET	●		●			
Ethernet						
RS-232C						
Parallel interface						
Optimizing the Scene Flow						
EtherCAT						
EtherNet/IP						
PROFINET			●	●		
Ethernet						
RS-232C						
Parallel interface						
Connecting the Controller						●
EtherCAT						
EtherNet/IP						
PROFINET	●		●		●	
Ethernet						
RS-232C						
Parallel interface						
Using Helpful Functions						●
EtherCAT						
EtherNet/IP						
PROFINET	●					
Ethernet						
RS-232C						
Parallel interface						
Troubleshooting and Problem Solving	●					

Manual Structure

Page Structure

The following page structure is used in this manual.



Note This illustration is provided only as a sample. It may not literally appear in this manual.

Special Information

Special information in this manual is classified as follows:



Precautions for Safe Use

Precautions on what to do and what not to do to ensure safe usage of the product.



Precautions for Correct Use

Precautions on what to do and what not to do to ensure proper operation and performance.



Additional Information

Additional information to read as required.

This information is provided to increase understanding or make operation easier.

Conventions Used in This Manual

Use of Quotation Marks and Brackets

In this manual, menus and other items are indicated as follows.

Bold	Menu	Indicates the menu bar, button, and icon.
<i>Italic</i>	Item name	Indicates the item and area names displayed on the screen.

Sections in This Manual

1	FH-UMLIC-08 Installation Manual
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CONTENTS

Introduction	1
Intended Audience	1
Applicable Products	1
Relevant Manuals	2
Manual Structure	4
Page Structure	4
Special Information	5
Conventions Used in This Manual	5
Sections in This Manual	7
Terms and Conditions Agreement	9
Warranty, Limitations of Liability	9
Application Considerations	10
Disclaimers	10
Safety Precautions	12
Precautions for Safe Use	13
Precautions for Correct Use	14
Regulations and Standards	15
Related Manuals	16
Revision History	18

Section 1 FH-UMLIC-08 Installation Manual

1-1 Introduction	1-2
1-2 Applicable Devices and Device Configuration	1-3
1-2-1 Applicable Devices	1-3
1-2-2 Device Configuration	1-3
1-3 Operating procedure	1-4
1-4 Troubleshooting	1-7

Terms and Conditions Agreement

Warranty, Limitations of Liability

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Safety Precautions

For details on Safety Precautions, refer to *Safety Precautions* in the *Vision System FH/FHV Series User's Manual* (Cat. No. Z365) and the *FH-UMLIC-08 Instruction Sheet* (****- *).

Precautions for Safe Use

For details on Precautions for Safe Use, refer to *Precautions for Safe Use* in the *Vision System FH/FHV Series User's Manual* (Cat. No. Z365) and the *FH-UMLIC-08 Instruction Sheet* (5853214-7).

Precautions for Correct Use

For details on Precautions for Correct Use, refer to *Precautions for Correct Use* in the *Vision System FH/FHV Series User's Manual* (Cat. No. Z365) and the *FH-UMLIC-08 Instruction Sheet* (5853214-7).

Regulations and Standards

For details on Regulations and Standards, refer to *Regulations and Standards* in the *Vision System FH/FHV Series User's Manual (Cat. No. Z365)*.

Related Manuals

The followings are the manuals related to this manual. Use these manuals for reference.

Name of Manual	Cat. No..	Model	Purpose	Contents
FH-UMLIC-08 Instruction Sheet	5853214-7	FH-UMLIC-08	To confirm the safety and usage precautions of the FH Application Software FH-UMLIC-08. When User want to know about the hardware specifications or to setup the FH Application Software FH-UMLIC-08.	Describes the definitions of basic terms, product specifications, how to use, meaning of signal words, and precautions for correct use of FH-UMLIC-08 in the manual.
Vision System FH Instruction Sheet	3102269-4	FH-2□□□ FH-2□□□-□□ FH-5□□□ FH-5□□□-□□	To confirm the safety and usage precautions of the Vision System FH series Sensor Controller.	Describes the definitions of basic terms, meaning of signal words, and precautions for correct use of FH series in the manual.
Vision System FH/FHV Series User's Manual	Z365	FH-1□□□ FH-1□□□-□□ FH-2□□□	When User want to know about the FH/FHV series.	Describes the soft functions, setup, and operations to use FH/FHV series/
Vision System FH/FHV Series User's manual for Communications Settings	Z342	FH-2□□□-□□ FH-3□□□ FH-3□□□-□□ FH-5□□□ FH-5□□□-□□ FH-L□□□ FH-L□□□-□□ FHV7□-□□□□□-C FHV7□-□□□□□-S□□ FHV7□-□□□□□-S□□-□□ FHV7□-□□□□□-H□□ FHV7□-□□□□□-H□□-□□	When User confirm the setting of communication functions.	Describes the functions, settings, and communications methods for communication between FH/FHV series and PLCs. The following communications protocol are described. Parallel, PLC Link, EtherNet/IP, EtherCAT, and Non-procedure.
FH Application Software FH-UMLIC-08 Processing Item Function Reference Manual	Z437	FH-UMLIC-08 FH-5552/FH-5552-□□ FH-5551/FH-5551-□□	When User confirm the details of each processing items at the create the measurement flow or operate it.	Describes the software functions, settings, and operations for using FH/FHV series.
Vision System FH series Hardware Setup Manual	Z366	FH-1□□□ FH-1□□□-□□ FH-2□□□ FH-2□□□-□□ FH-3□□□ FH-3□□□-□□ FH-5□□□	When User want to know about the Hardware specifications or to setup the Sensor Controller of the Vision System FH series.	Describes FH series specifications, dimensions, part names, I/O information, installation information, and wiring information.
Vision System FH series Macro Customize Functions Programming Manual	Z367	FH-5□□□-□□ FH-L□□□ FH-L□□□-□□	When User operate or programming using Macro Customize functions.	Describes the functions, settings, and operations for using Macro Customize function of the FH series.

Name of Manual	Cat. No..	Model	Purpose	Contents
Vision System FH/FHV Series Operation Manual for Sysmac Studio	Z343	FH-1□□□ FH-1□□□-□□ FH-2□□□ FH-2□□□-□□ FH-3□□□ FH-3□□□-□□ FH-5□□□ FH-5□□□-□□ FHV7□-□□□□□-C FHV7□-□□□□□-S□□ FHV7□-□□□□□-S□□-□ □ FHV7□-□□□□□-H□□ FHV7□-□□□□□-H□□-□ □	When User connect to NJ/NX series via EtherCAT communication.	Describes the operating procedures for setting up and operating FH/FHV series Vision Sensors from the Sysmac Studio FH/FHV Tools.

Revision History

A manual revision code appears as a suffix to the catalog number on the front and back covers of the manual.

Cat. No.

Z511-E1-01

Revision code

Rev. Code	Rev. Date	Revision Contents
01	Sep. 2025	Original production

FH-UMLIC-08 Installation Manual

1-1	Introduction	1-2
1-2	Applicable Devices and Device Configuration	1-3
1-2-1	Applicable Devices	1-3
1-2-2	Device Configuration	1-3
1-3	Operating procedure.....	1-4
1-4	Troubleshooting	1-7

1-1 Introduction

This manual describes the procedures for upgrading the software of the FH sensor controller with the FH-UMLIC-08.

Please perform the software version upgrade only after confirming the operating procedures and cautions. After upgrading, if you want to return to the previous version, use the Version upgrade tool and install the applicable FH sensor controller software.



Precautions for Correct Use

- FH-UMLIC-08 can be used for version upgrade of one FH sensor controller.
 - Keep the FH-UMLIC-08 device in a safe place as it will be needed when using again or repairing a controller.
 - Do not make any modifications to the files or file structure of the FH-UMLIC-08. It may cause the device to no longer function correctly.
-

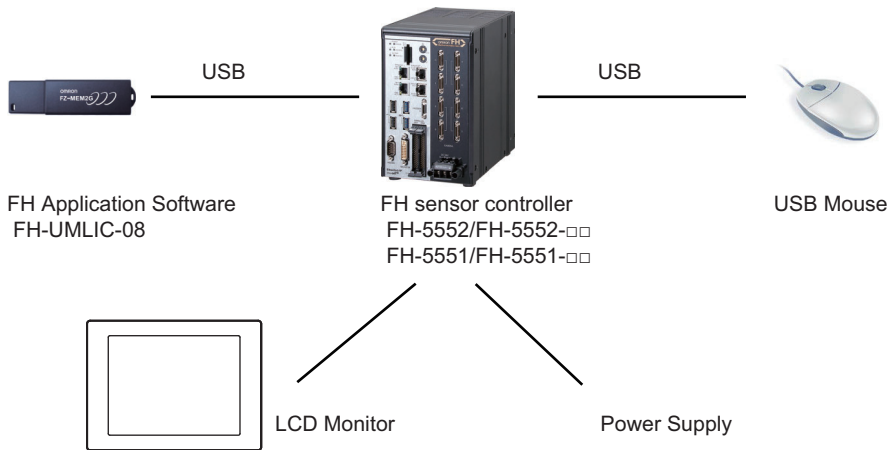
1-2 Applicable Devices and Device Configuration

1-2-1 Applicable Devices

The devices for which there is FH-UMLIC-08 support are as follows.

Name	Model
FH sensor controller	FH-5552
	FH-5552-10
	FH-5552-20
	FH-5551
	FH-5551-10
	FH-5551-20

1-2-2 Device Configuration



Name	Model
FH-UMLIC-08 Version Update Tool	FH-UMLIC-08
FH sensor controller	FH-5552
	FH-5552-10
	FH-5552-20
	FH-5551
	FH-5551-10
	FH-5551-20
USB Mouse	-
LCD Monitor	-
Power Supply	-

1-3 Operating procedure

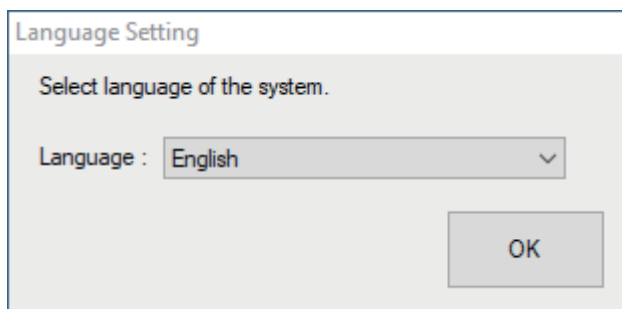


Precautions for Correct Use

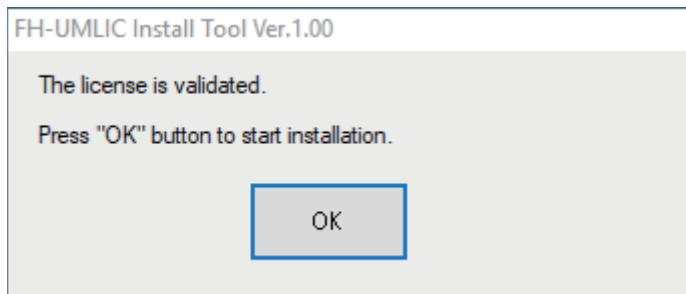
Do not remove the FH-UMLIC-08 from the FH sensor controller during the version upgrade. It may cause the version upgrade to fail.

Do not turn off the power to the FH sensor controller during the version upgrade. It may cause the version upgrade to fail.

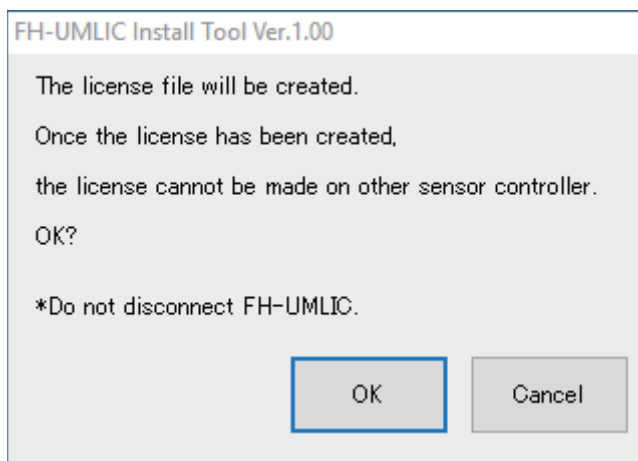
- 1 Make sure the FH-UMLIC-08 is inserted in the FH sensor controller when it is started up. The **Language Setting** dialog will be displayed the first time the FH-UMLIC-08 is used. In the **Language Setting** dialog, select the language and click **OK**.



- 2 The following dialogs will be displayed. Click **OK**.
 - If the license file has already been generated:

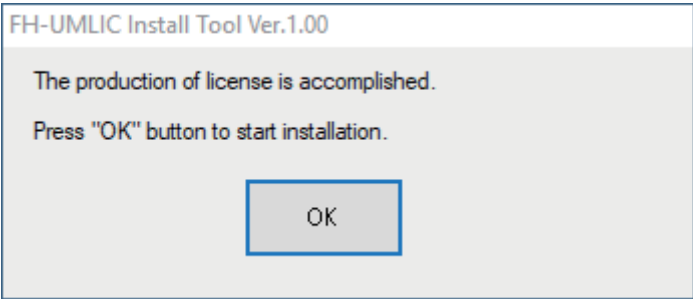


- If the license file has not already been generated:

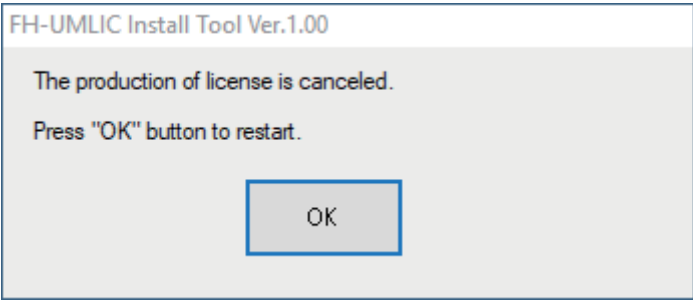


If you click **OK**, the dialog will not be displayed again.

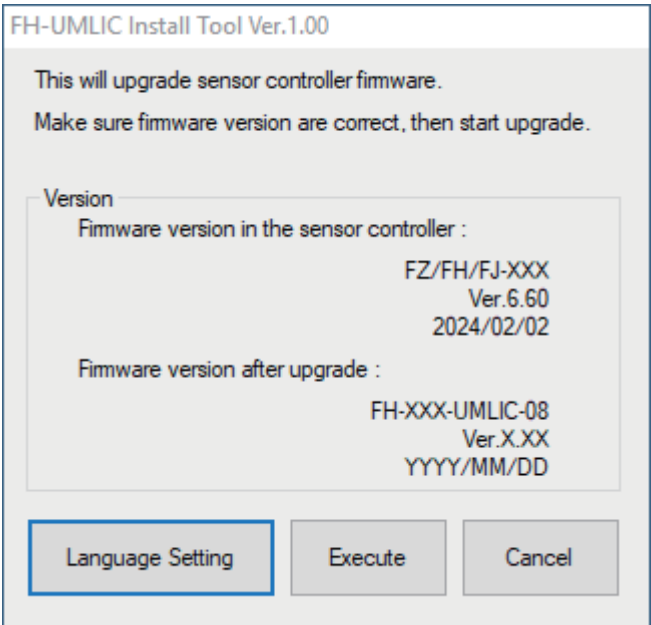
The following dialogs will be displayed. Click **OK**.



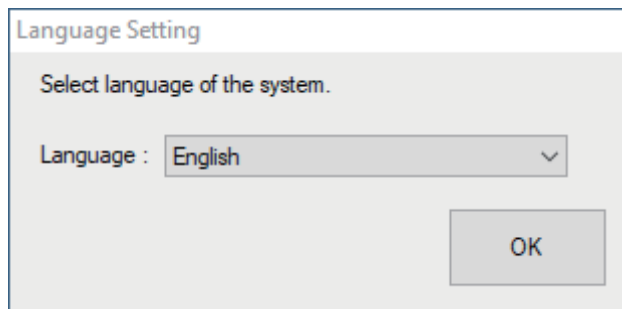
If you click **Cancel**, the license file creation will be canceled and the FH sensor controller will be restarted.



3 The following dialog will be displayed. Click **Execute**.



- Clicking **Execute** starts the Version upgrade.
- If you click **Cancel**, the Version upgrade is cancelled and the FH sensor controller will be re-started.
- If you click **Language Setting**, the **Language Setting** dialog will open. Select your desired language and click **OK**. The dialog will change to the selected language. If you click **Cancel** it will revert to the previous language.



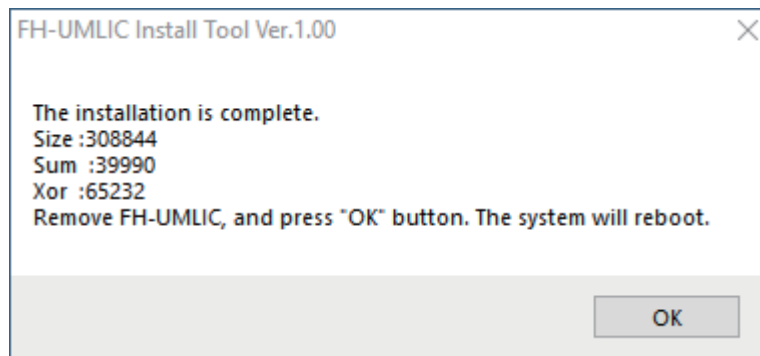
- 4** When upgrading, the FH sensor controller may restart more than once.



Precautions for Correct Use

Do not remove the FH-UMLIC-08 until the version upgrade is completely finished.

- 5** The following dialog will appear. Remove the FH-UMLIC-08 from the FH sensor controller and click **OK**.

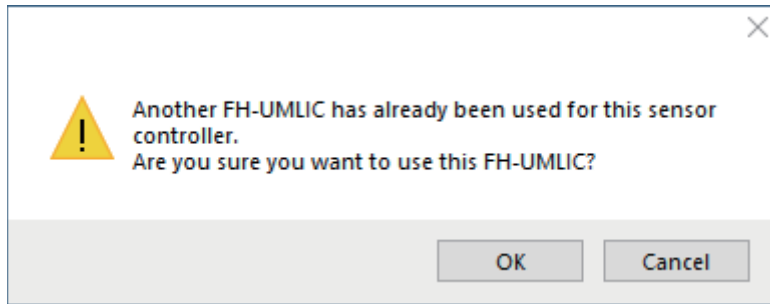


- 6** The FH sensor controller will restart.
This will complete the Version upgrade.

1-4 Troubleshooting

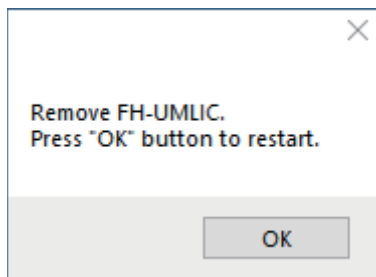
When this occurs	Possible cause	Corrective action
The Version upgrade tool does not start.	<ul style="list-style-type: none"> The files in the FH-UMLIC-08 may be corrupted. At startup, there may be a delay in recognizing FH-UMLIC-08, and the Version upgrade tool may have failed to load. 	<p>Perform the Version upgrade procedure again.</p> <p>If it does not start after the above actions, please contact us.</p>
The FH sensor controller does not restart.	<ul style="list-style-type: none"> A power failure may have occurred during installation, and the hardware of the FH sensor controller may be damaged. 	<p>Turn off the power of the FH sensor controller and restart it.</p> <p>If the above does not work, the file or hardware may be damaged. Please contact us.</p>
	<ul style="list-style-type: none"> The files in the FH sensor controller may be corrupted. The version upgrade may have failed due to the insertion / extraction of FH-UMLIC-08. 	<p>Perform the Version upgrade procedure again.</p> <p>If the above does not work, the file or hardware may be damaged. Please contact us.</p>
The camera or I/O do not work properly after the version upgrade.	<ul style="list-style-type: none"> Some files may not have been updated due to FH-UMLIC-08 insertion/removal while the FH sensor controller was restarting. 	<p>Perform the Version upgrade procedure again.</p> <p>If the above does not work, the file or hardware may be damaged. Please contact us.</p>
After version upgrade, the FH sensor controller does not start normally.	<ul style="list-style-type: none"> You may have selected "Do not install" in the driver installation confirmation dialog during the version upgrade. Some files may not have gotten updated. It is possible that the power was turned off without pressing the OK button when the version upgrade complete message was displayed. Some files may not have gotten updated. There was a delay in recognizing the FH-UMLIC-08 while restarting the FH sensor controller, and some files may not have gotten updated. 	<p>Perform the Version upgrade procedure again.</p> <p>If the above does not work, the file or hardware may be damaged. Please contact us.</p>

- If an FH-UMLIC-08 of the same format was previously used for the same FH sensor controller in the past, the following dialog is displayed.



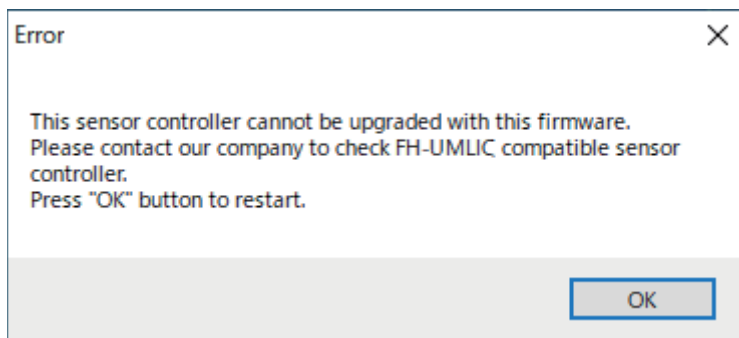
To execute, click **OK**.

To cancel, click **Cancel**. If you click **Cancel**, the following dialog is displayed. Remove the FH-UMLIC-08 and then click **OK**. The FH sensor controller will restart.

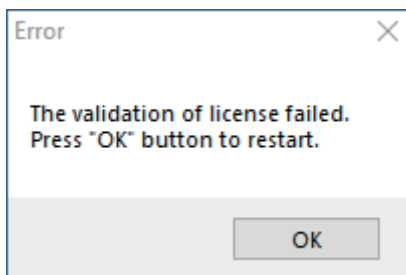


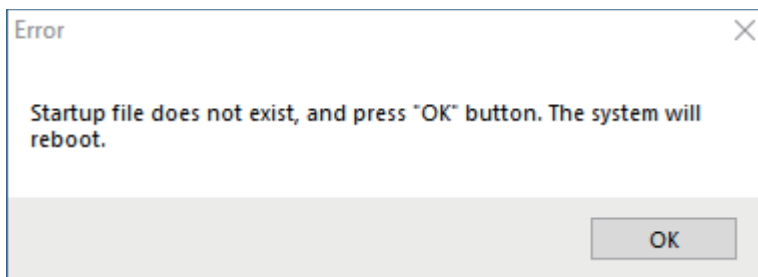
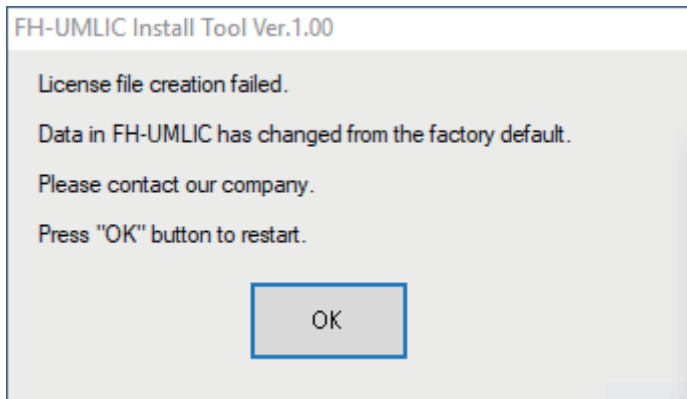
- If the FH-UMLIC-08 is executed on a non-supported FH sensor controller model, the following dialog will be displayed.

Check that the device is a supported model and perform the version upgrade procedure again. Refer to 1-2-1 *Applicable Devices* on page 1-3.

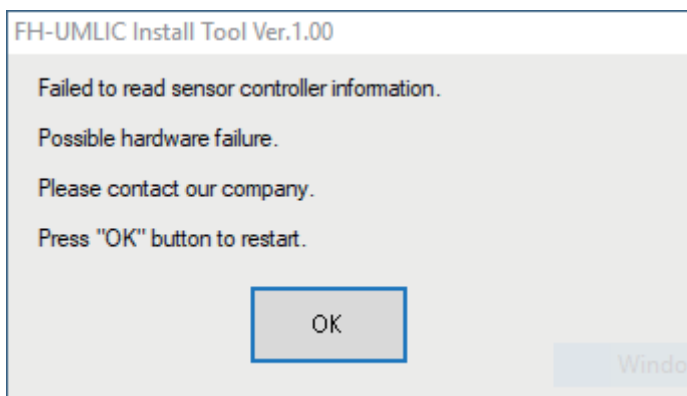
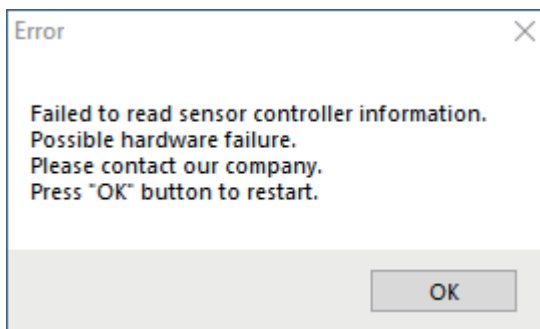


- If the file structure of FH-UMLIC-08 is changed, the following dialog may be displayed. If the following dialog appears, please contact us.

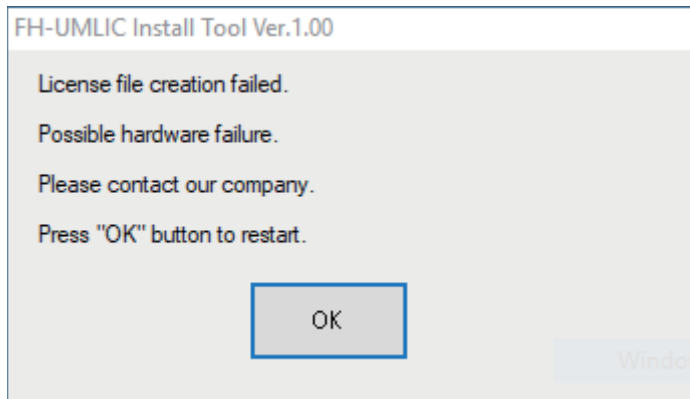




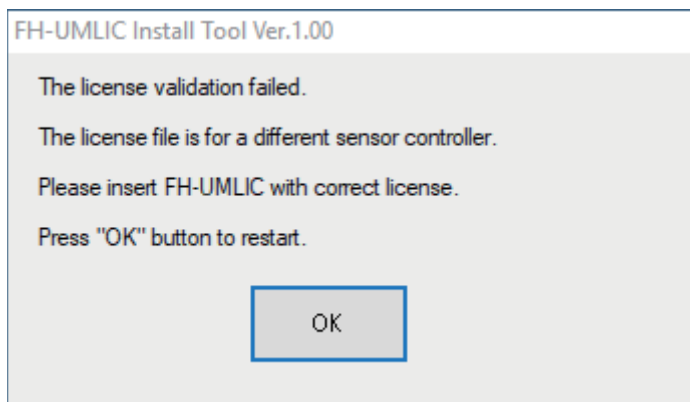
- If an error occurs in the FH sensor controller, the following dialog will be displayed. If the following dialog appears, please contact us.



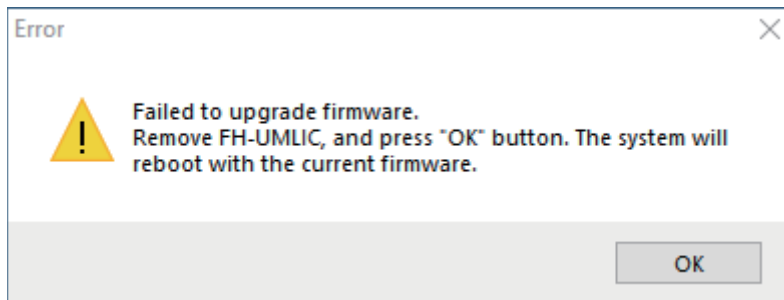
- If an error occurs in FH-UMLIC-08, the following dialog will be displayed. If the following dialog appears, please contact us.



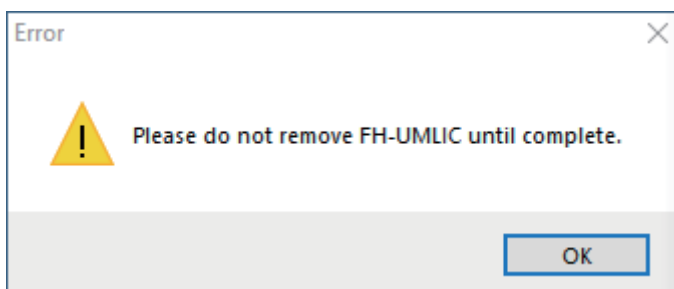
- If you use a licensed FH-UMLIC-08 with an FH sensor controller that is different from the one used when the license was created, the following dialog will be displayed. Use FH-UMLIC-08 with the correct license file.



- If the version upgrade fails, the following dialog will be displayed. Perform the Version upgrade procedure again.



- If you remove the FH-UMLIC-08 while updating the driver, the following dialog will be displayed. Connect FH-UMLIC-08 again and press the **OK** button. The Version upgrade will continue.



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Kyoto, JAPAN

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