Vision Sensor
FH/FHV Series
FH/FHV Launcher
Instruction Manual

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1. Introduction

1.1. Introduction

Thank you for purchasing an FH/FHV series Vision Sensor.
This instruction manual contains necessary information such as function, performance, and operating methods.
Please observe the following when using FH/FHV Launcher.

- Read this instruction manual thoroughly and use the tools correctly after understanding it sufficiently.
- Keep this instruction manual in a safe place so that it can be referred to whenever required.

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1.3. Safety Precautions Regarding Security

• Apply the latest security updates on your computer's OS to avoid security risks caused by a vulnerability in the OS.
• Always use the highest version of this software to add new features, increase operability, and enhance security.
• Manage usernames and passwords for this software carefully to protect them from unauthorized uses.
• Set up a firewall (E.g., disabling unused communication ports, limiting communication hosts, etc.) on a network for a control system and devices to separate them from other IT networks. Make sure to connect to the control system inside the firewall.

1.4. Symbols Used in This Instruction Manual

The symbols used in this manual have the following meanings.

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. Notes and restrictions.

Additional Information

Additional information to read as required. This information provides contents to increase understanding or make operation easier.

Reference

This information provides places where detail and related information can be found.

1.5. Relevant Manuals

The following table gives relevant manuals for FH/FHV series Vision Sensor. Please check them too.

Name of Manual	Man. No.	Model	Propose	Contents
Vision System FH/FHV Series User's Manual	Z365	FH-2□□□ FH-2□□□-□□ FH-5□□□ FH-5□□□-□□ FH-L□□□ FH-L□□□-□□ FHV7□-□□□□-□□□-□□	When User want to know how to setup the Sensor Controller of the Vision System FH/FHV series.	Describes the soft funtions, setup, and operations to use Sensor Controller of the Vision System FH/FHV series.
Vision System FH/FHV Series Processing Item Function Reference Manual	Z341		When User confirm the details of each prcessing items at the creating the measument flow or operating it.	Describes the software functions, settings, and operations for using FH/FHV series.
Vision System FH/FHV Series User's Manual for Communications Settings	Z342		When User confirm the setting of communiction functions.	Describes the functions, settings, and communica-tions methods for com-municating between FH/FHV series. The following communica-tion protocol is described. Parallel, PLC Link, Eter-net/IP, EtherCAT, and Non-procedure.
Vision System FH Series Hardware Setup Manual	Z366	FH-2□□□ FH-2□□□-□□ FH-5□□□ FH-5□□□-□□ FH-L□□□ FH-L□□□-□□	When User want to know about the Hard-ware specifictions or to setup the Sensor Controller of the Vision System FH series.	Describes FH series speci-fications, dimensions, part names, I/O infomation, installation information, and wiring information.
Vision System FH Series Macro Customize Functions Programming Manual	Z367	FH-2□□□ FH-2□□□-□□ FH-5□□□ FH-5□□□-□□ FH-L□□□ FH-L□□□-□□	When User operates or programming using Macro Customize func-tions.	Describes the functions, settings, and operations for using Macro Customize function of the FH-series.
Vision System FH/FHV Series Operation manual for Sysmac Studio	Z343	FH-2□□□ FH-2□□□-□□ FH-5□□□ FH-5□□□-□□	When User connect to NJ/NX series via EtherCAT communica-tion.	Describes the operating procedures for setting up and operating FH/FHV series Vision Sensors from the Sysmac Studio tools.

FHV Series Smart Camera Setup Manual	Z408	FHV7□-□□□□-□□□-□□	When User want to know about the Hard-ware specifictions or to setup the Smart Camera FHV series.	Describes FHV series specifications, dimensions, part names, I/O infomation, installation information, and wiring information.

1.6. Revision History

Revision Symbol	Rev. Date	Rev. Reason
A	Apr. 2017	Creation
B	Mar. 2018	Corrected installation procedures Added troubleshooting
C	Jul. 2019	Corresponds to Windows10 Delete FZ5 series
D	Jul. 2020	Added Centralized Manager tool
E	Sep. 2022	Revisions for adding safety precautions regarding security.
F	Mar. 2023	Corresponds to Windows11
G	Mar. 2024	Modified Language setting pane

2. FH/FHV Launcher

2.1. Overview

FH/FHV Launcher provides the following functions.

- Version selecting function of simulation software (FH_FHV Simulation Tool)
  Specifies and runs simulation software with the version to be used.
  Specifying a file to be used may enable simulation software with corresponding version to run.
- Version selecting function of a remote operation tool (FH_FHV Remote Operation Tool)
  Specifies and runs a remote operation tool with the version to be used.
  Specifying a file to be used may enable a remote operation tool with corresponding version to run.
- Version selecting function of a centralized maneger tool (FH_FHV Remote Operation Tool)
  Specifies and runs a centralized maneger tool with the version to be used.
  Specifying a file to be used may enable a centralized maneger tool with corresponding version to run.
- Switching function of display language
  Switches the language displayed on FH/FHV Launcher.

2.2. Intended Audience and Required Skill

This instruction manual and FH/FHV Launcher intends people who are responsible for the operations of Vision Sensor FH/FHV series. (For the operation of Vision Sensor FH/FHV series and the details, refer to the Vision Sensor FH/FHV series User's Manual and Communications Settings.)

2.3. Terminology

Term	Description
FH/FHV Launcher	This software. Switches and runs multiple FH/FHV simulation software and remote operation tools.
Remote operation tool	A tool to be used when remotely operating FH/FHV sensor controllers.
Centralized manager tool	This function allows you to change the settings of multiple sensor controllers from a PC on the same network. This function can only be used with an Ethernet connection.

2.4. Recommended Operating Environment

Item	Requirements
CPU	Intel Pentium Processor (SSE2 or higher)
OS	Windows 7 Professional (32/64bit) or Enterprise (32/64bit) or Ultimate (32/64bit) Windows 10 Pro (32/64bit) or Enterprise (32/64bit) Windows 11 Pro (64bit) or Enterprise (64bit)
Memory	RAM: 2GB or more
Available space of HD	2GB or more
Display	Resolution: 1,024 x 768 dots or higher The size of apps and text: 100% Display color: True Color (32 bits)
Network	10BASE-T compatible network (100BASE-TX recommended)

To use the software, Microsoft .NET Framework 3.5 must be installed.

2.5. Restrictions

A software version of the corresponding simulator is 5.71 or later.

The software version is 5.70 or earlier is not supported.

3. Installation

The FH/FHV Launcher software is possible to download with free by doing the member registration after purchasing the Image Sensor Controller. For details, refer to the membership registration sheet packed with the Smart Camera.

Precautions for Correct Use

Uninstall simulation software with version 5.61 or earlier first, and then install this.

3.1. Installing Procedures

1. Decompress the FH/FHV Launcher to an appropriate folder and click setup.exe.
   Install it according to the instructions displayed on the screen.

2. Click the [Install FH/FHV Launcher] button.
   The installer for FH/FHV Launcher will automatically start.
   Install it according to the instructions displayed on the screen.

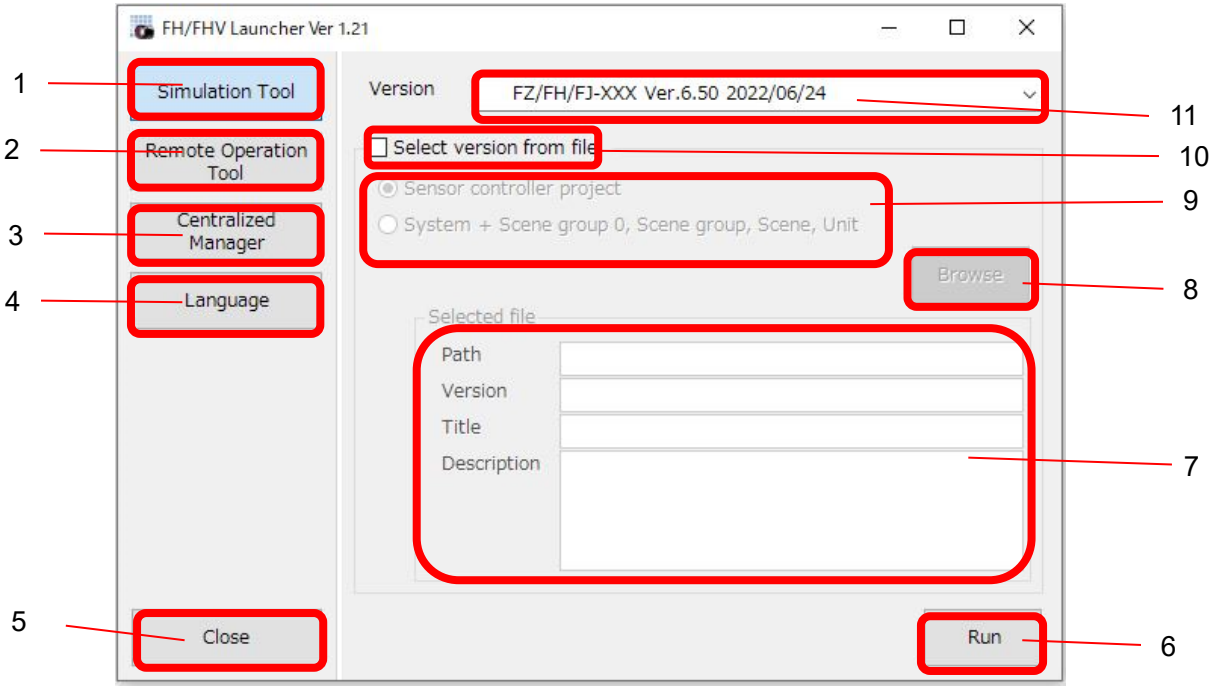
3. Then click the [Install Simulation Software] button.
   The installer for the simulation software will automatically start.
   Install it according to the instructions displayed on the screen.

4. Enter the license No. when continuously using this software more than 30 days.
   Launch the FH_FHV Licence tool from the start button.
   Enter the license No.

4. Windows

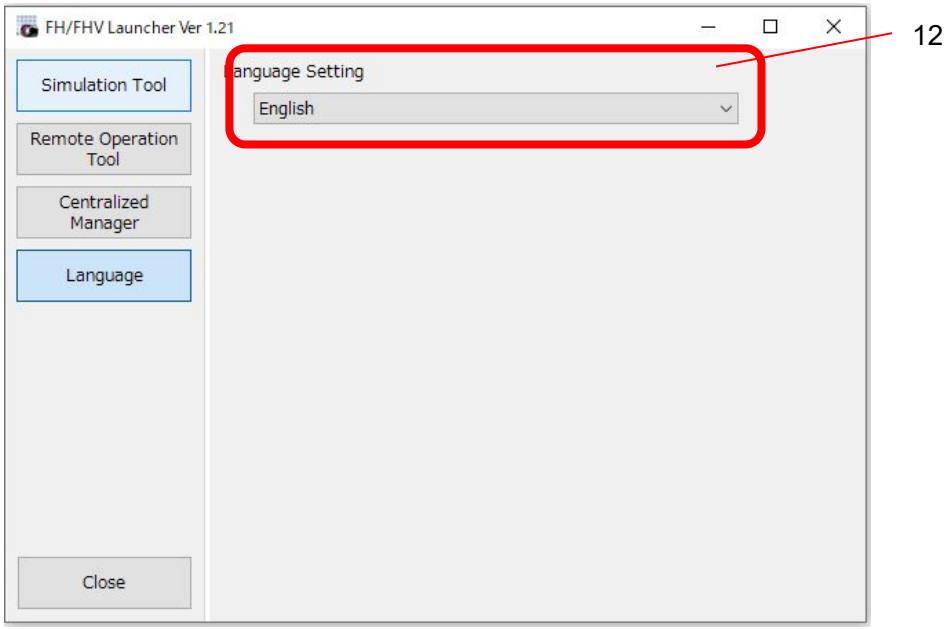
Windows for FH/FHV Launcher consists of three windows like simulation window, remote operation tool window, and language setting window. Here describes FH/FHV Launcher window and each part of it.

4.1. Simulation Software Window, Remote Operation Tool, Centralized Manager Tool Window



1	[Simulation Tool] button	Displays the simulator startup window.
2	[Remote Operation Tool] button	Displays the remote operation tool window
3	[Centralized Manager Tool] button	Displays the centralized manager tool window
4	[Language] button	Displays the language setting window.
5	[Close] button	Exits FH/FHV Launcher.
6	[Run] button	Runs the selected version of the simulation software or the remote operation tool.
7	File information display	Displays the selected file information. When selecting "system + Scene group 0, Scene group, Scene, Unit", "Title" and "Description" are not displayed.
8	[Browse] button	Selects a file to check the version.
9	File selection button	Selects a file type to check the version.
10	Select version from file	Check the version of software to run by specifying a file.
11	Combo box for version	Displays all versions installed as a candidate. When the [Simulation Tool] button or the [Remote Operation Tool] button is clicked, a simulator or remote operation tool with the selected and displayed version will run. The setting is saved and will be default for the next startup.

4.2. Language Window



No.	Name	Description
12	Language selection box	Displays the current language setting. When changing the display language, the change is reflected immediately. The setting is saved and will be default for the next startup.

5. Use Procedures

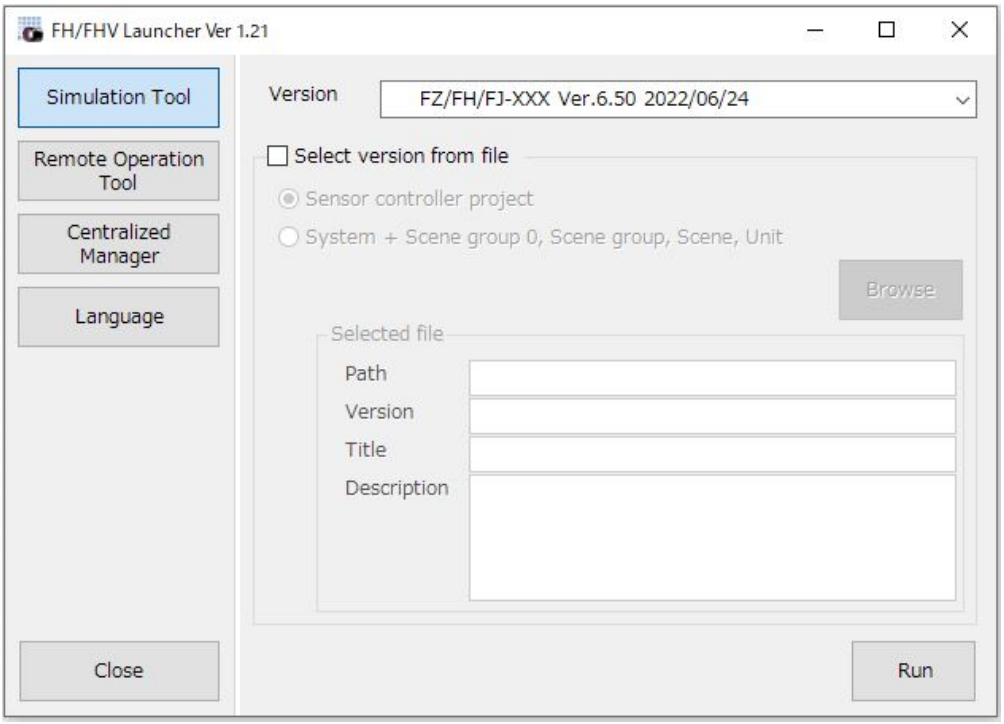
Here describes the startup method for FH/FHV Launcher, the startup method for simulation software, the startup method for centralized manager software, and the change method of language setting.

5.1. Run FH/FHV Launcher

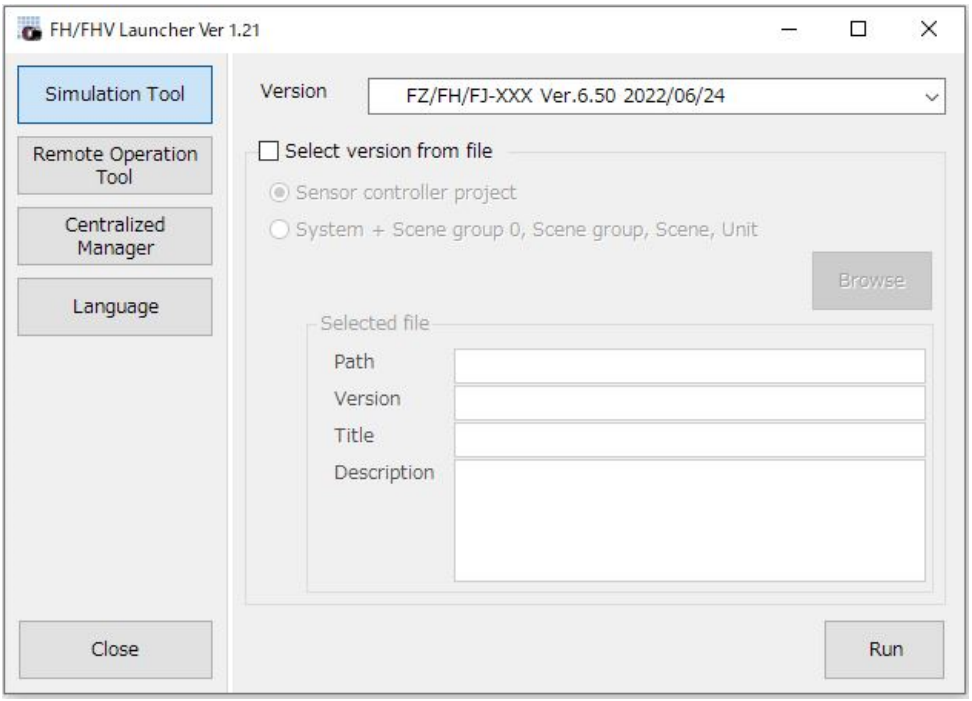
The following describes the startup procedures for FH/FHV Launcher.

Procedures

1. From the [Start] menu on your PC, select [All Programs] - [OMRON] - [FH_FHV Series] - [FH_FHV Launcher]
2. FH/FHV Launcher window appears.



5.2. Run Simulation Software



Procedures

1. Click the [Simulation Tool] button.
2. Specify the version if it has already been known.
   All software version installed in the PC will be displayed.
3. When data for "Sensor controller project", "System +Scene group 0", "Scene group", "Scene", and "Unit" exist, the version of software to be run can be checked by specifying data.
   - Check the check box of "Select version from file".
   - Specify a file.

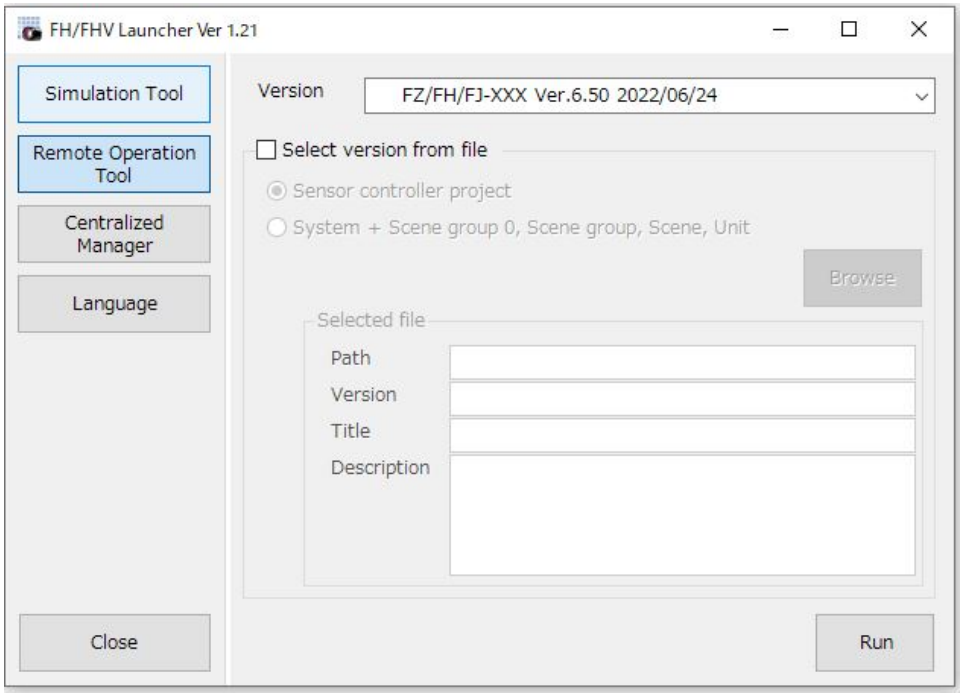
Item	Setting value	Description
Select version from file	• [No Check] • Check	Checks when checking the version from file.
Configuration file	• [Sensor controller project] • System +Scene group 0, Scene group, Scene, Unit	Sensor controller project: Selects this when checking the version of simulation software with data generated by the environment copy function. System +Scene group 0, Scene group, Scene, Unit: Selects this when checking the version of simulation software by using data like "System +Scene group 0", "Scene group", "Scene", and "Unit".

Precautions for Correct Use

If no version of a simulator to match the configuration file exists, a message of "No version of a simulator to match the configuration file is installed." will appear.

4. The matched version of a simulator with the configuration file will appear.
5. Click the [Run] button.

5.3. Run Remote Operation Tool



Procedures

1. Click the [Remote Operation Tool] button.
2. Specify the version if it has already been known.
3. When data for "Sensor controller project", "System +Scene group 0", "Scene group", "Scene", and "Unit" exist, the version of software to be run can be checked by specifying data.
   - Check the check box of "Select version from file".
   - Specify a file.

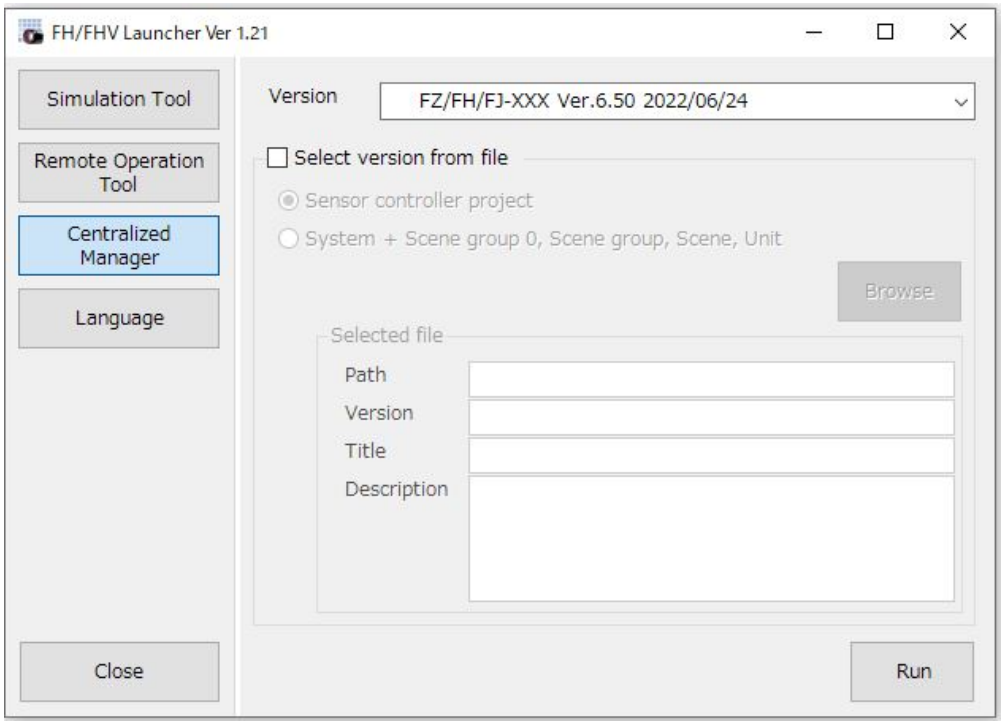
Item	Setting value	Description
Select version from file	• [No Check] • Check	Checks when checking the version from file.
Configuration file	• [Sensor controller project¥ • System +Scene group 0, Scene group, Scene, Unit	Sensor controller project: Selects this when checking the version of simulation software with data generated by the environment copy function. System +Scene group 0, Scene group, Scene, Unit: Selects this when checking the version of simulation software by using data like "System +Scene group 0", "Scene group", "Scene", and "Unit".

Precautions for Correct Use

If no version of a simulator to match the configuration file exists, a message of "No version of a simulator to match the configuration file is installed." will appear.

4. The matched version of a simulator with the configuration file will appear.
5. Click the [Run] button.

5.4. Centralized Manager Tool



Procedures

1. Click the [Cnetralized Manager] button.
2. Specify the version if it has already been known.
3. When data for "Sensor controller project", "System +Scene group 0", "Scene group", "Scene", and "Unit" exist, the version of software to be run can be checked by specifying data.
   - Check the check box of "Select version from file".
   - Specify a file.

Item	Setting value	Description
Select version from file	• [No Check] • Check	Checks when checking the version from file.
Configuration file	• [Sensor controller project] • System +Scene group 0, Scene group, Scene, Unit	Sensor controller project: Selects this when checking the version of simulation software with data generated by the environment copy function. System +Scene group 0, Scene group, Scene, Unit: Selects this when checking the version of simulation software by using data like "System +Scene group 0", "Scene group", "Scene", and "Unit".

Precautions for Correct Use

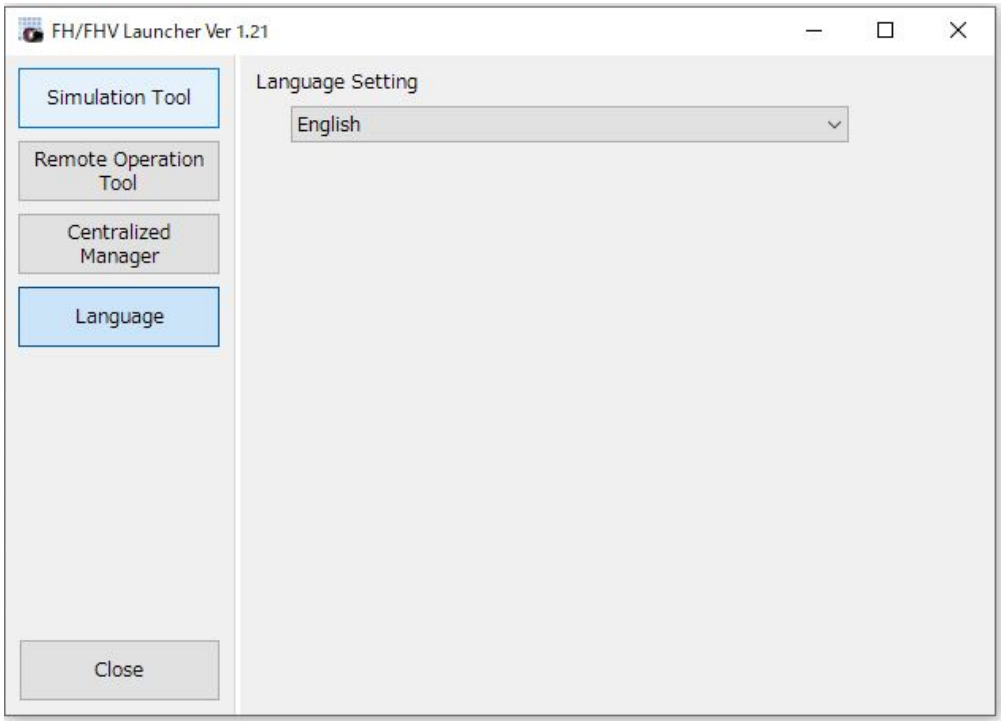
If no version of a simulator to match the configuration file exists, a message of "No version of a simulator to match the configuration file is installed." will appear.

4. The matched version of a simulator with the configuration file will appear.
5. Click the [Run] button.

Refer to Collectively Change the Settings of Multiple Controllers [Centralized Manager] in the Vision System FH/FHV Series User's Manual (Cat. No. Z365) for details on centralized manager tool.

5.5. Change Display Language

Change the current language setting of the tool.



Procedures

1. Click the [Language] button.
2. Select language to display in the language setting dialog box.

Name	Description
Language seting	Displays the current language setting. When changing the diplay language, the change is reflected immediately. The setting is saved and will be default for the next startup.

5.6. Troubleshooting

Trouble	Actions
A message of "A simulator version that matches the setting is not installed." appears.	• The message appears when no matched version of a simulator with the configuration file is not installed. Get the simulation software with the version matching the configuration file. • The configuration file may be 5.70 or earlier. This software does not support those. Check the software version for the sensor controller using the configuration file first, and then run simulation software with the same version.
“License error!” appears at startup.	• It passes over 30 days from the installation. Register the license No. when you continue using this software.
Buttons such as “File selection button” are not displayed in the simulation software window.	• The DPI setting of the PC may be set to “Expansion”. Set it to “100% (96 DPI) or “Standard”.

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