

PS-API

Installation Guide for OCX

Edition 13.10 R01
Dec. 20, 2023

i-PRO Co., Ltd.

With regard to the contents of this document.

- It is prohibited to reproduce part or all in this document.

- i-PRO Co., Ltd. reserves the right, at its discretion, to change, modify, add, or remove portions of the contents of this document at any time.

Revision Record

Version	Revised Date	Content of Revision
4.0 R01	Dec. 14, 2010	First Edition
4.1 R01	Aug. 24, 2011	2.1 Added Windows 7 Professional SP1 to System Environment. 2.1 Added Microsoft® Windows Server® 2003 to System Environment. 3.1.1 Updated Package contents list.
5.0 R01	Dec. 21, 2011	2.1 Added Microsoft® Windows Server® 2008 R2 to System Environment. 3.4/3.5 Added PS-ALARM Install/Uninstall 3.6/3.7 Added PS-LOOKUP Install/Uninstall
6.0 R01	Apr. 17, 2012	Changed the document version.
7.0 R01	Dec. 13, 2012	Correction of Typographical Error
7.1 R01	Mar. 21, 2013	2.1 Added Microsoft® Windows® 8 Pro to System Environment. 3.2 Added Microsoft® Windows® 8 Pro to PS-API Install
7.2 R01	Jul. 12, 2013	Changed the document version. 3.2 PS-API Install – Updated and Changed model for ActiveX control for Network Interface Unit. Correction of Typographical Error
7.4 R01	Mar. 26, 2014	2.1 Added Microsoft® Windows® 8.1 Pro to System Environment. 2.1 Update System Environment. 3.2 Added Microsoft® Windows® 8.1 Pro to PS-API Install 3.4 Added Microsoft® Windows® 8.1 Pro to PS-ALARM Install 3.6 Added Microsoft® Windows® 8.1 Pro to PS-LOOKUP Install
8.1 R01	Jan. 20, 2015	2.1 Update System Environment.
9.0R01	Jul. 17, 2015	2.1 Update System Environment.
9.2 R01	Oct. 14, 2015	2.1 Added Microsoft® Windows® 10 Pro to System Environment. 3.2 Added Microsoft® Windows® 10 Pro to PS-API Install 3.4 Added Microsoft® Windows® 10 Pro to PS-ALARM Install 3.6 Added Microsoft® Windows® 10 Pro to PS-LOOKUP Install

Version	Revised Date	Content of Revision
9.3 R01	Jan. 22, 2016	<p>2.1 Added Microsoft® Windows Server® 2012 Standard to System Environment.</p> <p>2.1 Added Microsoft® Windows Server® 2012 R2 Standard to System Environment.</p> <p>2.1 Deleted Microsoft® Windows Server® 2003 Standard 64 bit Edition to System Environment.</p> <p>2.1 Deleted Microsoft® Windows Server® 2003 Standard 32 bit Edition to System Environment.</p> <p>2.1 Deleted Microsoft® Windows Server® 2003 Enterprise 64 bit Edition to System Environment.</p> <p>2.1 Deleted Microsoft® Windows Server® 2003 Enterprise 32 bit Edition to System Environment.</p> <p>3.2 Added Microsoft® Windows Server® 2012 Standard to PS-API Install.</p> <p>3.2 Added Microsoft® Windows Server® 2012 R2 Standard to PS-API Install.</p> <p>3.3 Added Microsoft® Windows Server® 2012 Standard to PS-API UnInstall.</p> <p>3.3 Added Microsoft® Windows Server® 2012 R2 Standard to PS-API UnInstall.</p> <p>3.4 Added Microsoft® Windows Server® 2012 Standard to PS-ALARM Install.</p> <p>3.4 Added Microsoft® Windows Server® 2012 R2 Standard to PS-ALARM Install.</p> <p>3.5 Added Microsoft® Windows Server® 2012 Standard to PS-ALARM UnInstall.</p> <p>3.5 Added Microsoft® Windows Server® 2012 R2 Standard to PS-ALARM UnInstall.</p> <p>3.6 Added Microsoft® Windows Server® 2012 Standard to PS-LOOKUP Install.</p> <p>3.6 Added Microsoft® Windows Server® 2012 R2 Standard to PS-LOOKUP Install.</p> <p>3.7 Added Microsoft® Windows Server® 2012 Standard to PS-LOOKUP UnInstall.</p> <p>3.7 Added Microsoft® Windows Server® 2012 R2 Standard to PS-LOOKUP UnInstall.</p>
9.5 R01	Jun. 22, 2016	1.5 Added Open Source Software
10.0 R01	Feb. 08, 2017	<p>2.1. Updated System Environment</p> <p>3.2 .Added H.265 to PS-API Install.</p>
10.1 R01	Jun. 19, 2017	<p>Change company name.</p> <p>2.1 Deleted Microsoft® Windows® XP Professional SP3 from System Environment.</p> <p>2.1 Deleted Microsoft® Windows Vista® Business SP2 32 bit Edition from System Environment.</p> <p>3.2/3.3 Update PS-API Install/Uninstall</p> <p>3.4/3.5 Update PS-ALARM Install/Uninstall</p> <p>3.6/3.7 Update PS-LOOKUP Install/Uninstall</p>
10.3 R01	Dec. 12, 2017	2.1. Updated System Environment.
11.40 R01	Jun. 26, 2019	<p>1.4. Updated Abbreviations.</p> <p>2.2. Updated Development Environment</p> <p>3.1.1. Updated The layout of ActiveX-Sample directory</p>

Version	Revised Date	Content of Revision
11.60 R01	May. 29, 2020	Change company name. 2.1 Added Microsoft® Windows Server® 2016 Standard to System Environment. 3.1.1. Updated The layout of ActiveX directory 3.2. Update ActiveX Control List
12.10 R01	Aug. 31, 2021	3.2 Added how to install ActiveX control (http://xxx.xxx.xxx.xxx/ImageViewer)
12.30 R01	Jan. 31, 2022	1.4. Updated Abbreviations 3.2 Updated how to install ActiveX control 4. Added Support
12.50 R01	Apr. 1, 2022	Change company name. 2.1 Added Microsoft® Windows® 11 Pro and Windows Server® 2019 Standard to System Environment. 4. Updated Support
12.80 R01	Sep. 30, 2022	2.1 Added Microsoft® Windows Server® 2022 Standard to System Environment. 2.1 Deleted Microsoft® Windows® 8 Pro from System Environment. 3.1.1. Updated The layout of ActiveX directory. 3.1.2. Updated Install Contents 3.2/3.3 Update PS-API Install/Uninstall 4. Updated Support
12.90 R01	Dec. 9, 2022	1.4. Updated abbreviation. Added NU series to NX series series NU series
13.10 R01	Dec. 20, 2023	Changed the notation from ActiveX to OCX.

INDEX

1.	Preface	1
1.1.	What's PS-API	1
1.2.	Trademarks and Registered Trademarks.....	1
1.3.	Limitation of liability.....	1
1.4.	Abbreviations	2
1.5.	Open Source Software	2
2.	System requirements	3
2.1.	System Environment.....	3
2.2.	Development Environment	4
3.	Setup	5
3.1.	Product.....	5
3.1.1.	Package Contents List.....	5
3.1.2.	Install Contents.....	9
3.2.	PS-API Install.....	10
3.3.	PS-API UnInstall	12
3.4.	PS-ALARM Install	14
3.5.	PS-ALARM UnInstall	15
3.6.	PS-LOOKUP Install.....	16
3.7.	PS-LOOKUP UnInstall	17
4.	Support.....	18
4.1.	Edge IE mode	18
4.1.1.	Preparation	18
4.1.2.	How to check whether Internet Explorer 11 is enabled or not on PC	18
4.1.3.	How to use Edge IE mode.....	20

1. Preface

1.1. What's PS-API

PS-API is the software which is provided to help to develop the application to control i-PRO Co., Ltd. made security products (Network cameras, Network Disk Recorders, Digital Disk Recorders, Network Interface Units) by the unified method and to get video image.

PS-API is provided as the OCX.

1.2. Trademarks and Registered Trademarks

Microsoft and Windows are registered trademarks of Microsoft Corporation in U.S. and/or other countries. Other names of companies and product contained in these operating instructions may be trademarks or registered trademarks of their respective owners.

1.3. Limitation of liability

- PS-API provides interfaces for the application software that controls i-PRO Co., Ltd. made security products (Network cameras, Network Disk Recorders, Digital Disk Recorders, Network Interface Units), and is not designed to protect against "theft" or "crime" independently.

- The provided sample programs are designed to instruct users how to use the SDK. They are not developed for the purpose of actual surveillance system.

- In no event shall i-PRO Co., Ltd. be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to below;

- [1] Any damage and loss, including without limitation, direct or indirect, special, sequential or exemplary, arising out of or relating to the product;
- [2] Personal injury or any damage caused by inappropriate use or neglect operation of the user;
- [3] Any problems, consequential inconvenience, or loss or damage, arising out of the reverse compiling or reverse engineering of the product;
- [4] Any loss or damage, or claims arising out from loss or leak of PS data including video data in the PC;
- [5] Any claim or action for damages, brought by any person or organization being a photogenic subject, due to violation of privacy with the result of that surveillance camera's picture, including saved data, for some reason, becomes public or is used for the purpose other than surveillance;

1.4. Abbreviations

The following abbreviations are used in these operating instructions.

Microsoft® Visual Basic 2005 is referred as Visual Basic 2005.

Microsoft® Visual C# 2005 is referred as Visual C# 2005.

Microsoft® Visual Basic 2012 is referred as Visual Basic 2012.

Microsoft® Visual C# 2012 is referred as Visual C# 2012.

Network Camera is referred as Camera.

Network Interface Unit is referred as Encoder.

Network Disk Recorder is referred as NWDR.

Network Disk Recorder (NX series, NU series) is referred as NX series.

Digital Disk Recorder (HD300 series) is referred as HD300.

Digital Disk Recorder (HD600 series, HD700 series) is referred as HD600/700.

Windows® Internet Explorer® is referred as IE.

Microsoft Edge is referred as Edge.

1.5. Open Source Software

This software is based in part on the work of the Independent JPEG Group.

2. System requirements

2.1. System Environment

The following table shows the PC specification that is needed for installing PS-API.

Table 2-1 OS

OS	Microsoft® Windows® 7 Professional SP1 32 bit Edition(*5) Microsoft® Windows® 7 Professional SP1 64 bit Edition(*5) Microsoft® Windows® 8.1 Pro 32 bit Edition(*2) Microsoft® Windows® 8.1 Pro 64 bit Edition(*2) Microsoft® Windows® 10 Pro 32 bit Edition Microsoft® Windows® 10 Pro 64 bit Edition Microsoft® Windows® 11 Pro Microsoft® Windows Server® 2008 R2 Standard SP1 (*1)(*5) Microsoft® Windows Server® 2008 R2 Enterprise SP1 (*1)(*5) Microsoft® Windows Server® 2012 Standard(*1) Microsoft® Windows Server® 2012 R2 Standard(*1) Microsoft® Windows Server® 2016 Standard/Desktop Experience) Microsoft® Windows Server® 2019 Standard/Desktop Experience) Microsoft® Windows Server® 2022 Standard/Desktop Experience)
----	---

Table 2-2 Minimum System requirements

Processor(*3)	Intel® Core™2 Quad 2.66GHz or more
Memory	2.0GB or more
Hard drive	10GB or more
LAN	100Mbps or more

Table 2-3 Recommended system requirements

Processor(*3)	Intel® Core™i7-4790
Memory	8.0GB or more(*4)
Hard drive	10GB or more
LAN	100Mbps or more

(*1) When using PS-API, it is necessary to install “Desktop Experience” to use Direct Show Filter functions.

(*2) Modern UI is not supported.

(*3) When displaying video on multiple screens, please use the recommended system requirements.

(*4) Please use two same Memorys that dual-channel supported.

(*5) Windows® Internet Explorer®11 or later is recommended.

2.2. Development Environment

The following table shows the development environment list that is supported by PS-API OCX.

Table 2-4 Development Environment

Target	Development Tool
PS-API OCX	Visual Basic 2005 SP1
	Visual C# 2005 SP1
	Visual Basic 2012 (*1)
	Visual C# 2012 (*1)

3. Setup

3.1. Product

3.1.1. Package Contents List

When unarchived PS-API_xxxxx_OCX.zip and PS-API_xxxxx_OCX-Sample.zip, there are the following expanding directories.

* xxxx : Version number

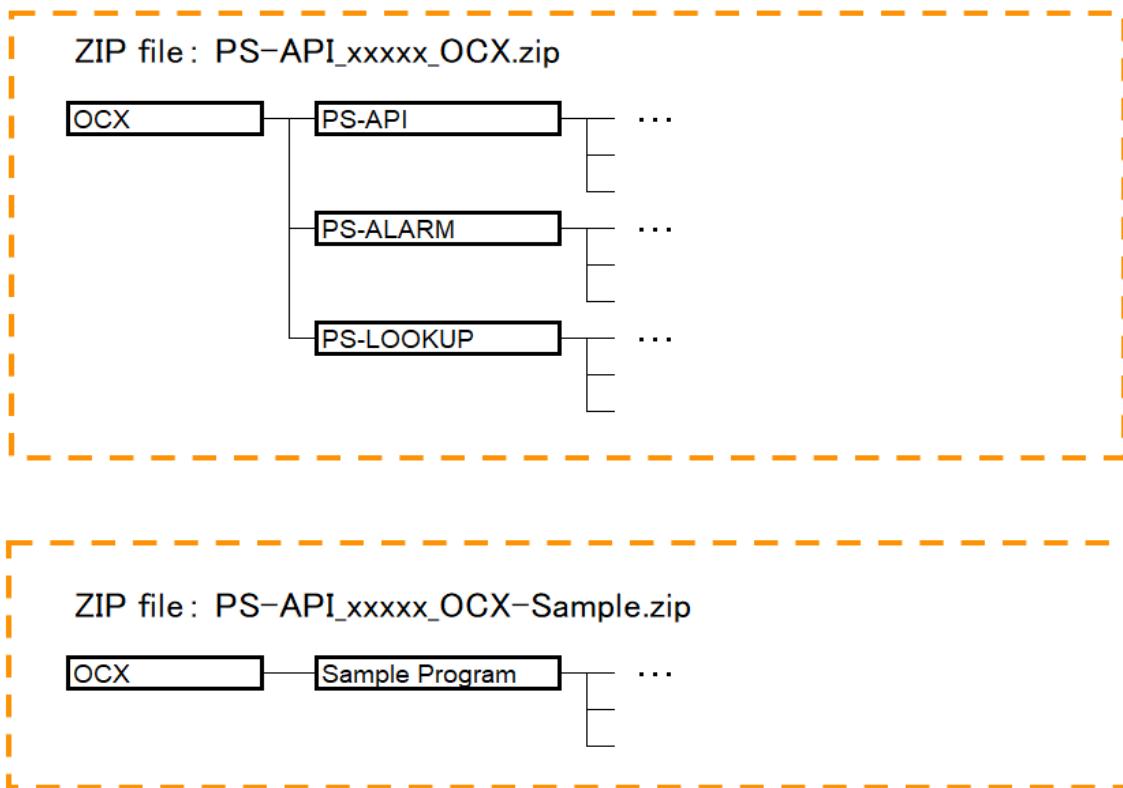


Figure 3-1 The layout of OCX directory

When using OCX type PS-API, please use the library files in PS-API directory.

When using OCX type PS-ALARM please use the library files in PS-ALARM directory.

When using OCX type PS-LOOKUP please use the library files in PS-LOOKUP directory.

- The layout of OCX directory

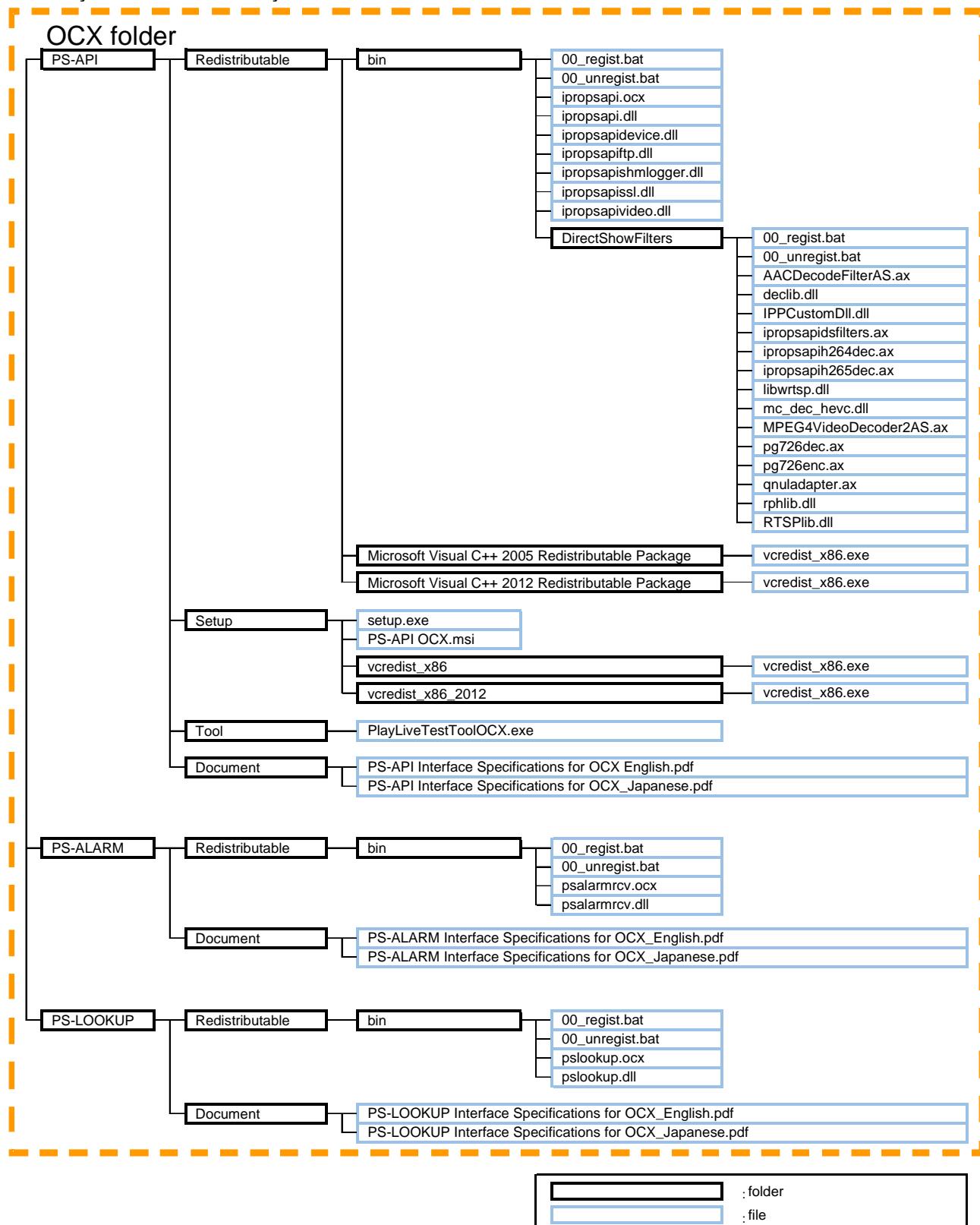


Figure 3-2 The layout of OCX directory

The overview of files included in each directory is as follows.

Table 3-1 The Overview of Files

Directory Name	Objective
PS-API¥ Redistributable	OCX files/DLL files Redistributable.
PS-API¥ Setup	Installer for OCX and DirectShow filters. For development. NOT REDISTRIBUTABLE.
PS-API¥ Tool	Test tool. By using this tool, you can confirm connecting to a target device with PS-API. NOT REDISTRIBUTABLE.
PS-API¥ Document	The users manual. (This document) NOT REDISTRIBUTABLE.

Directory Name	Objective
PS-ALARM¥ Redistributable	OCX files/DLL files Redistributable.
PS-ALARM¥ Document	The users manual. NOT REDISTRIBUTABLE.

Directory Name	Objective
PS-LOOKUP¥ Redistributable	OCX files/DLL files Redistributable.
PS-LOOKUP¥ Document	The users manual. NOT REDISTRIBUTABLE.

- The layout of OCX-Sample directory

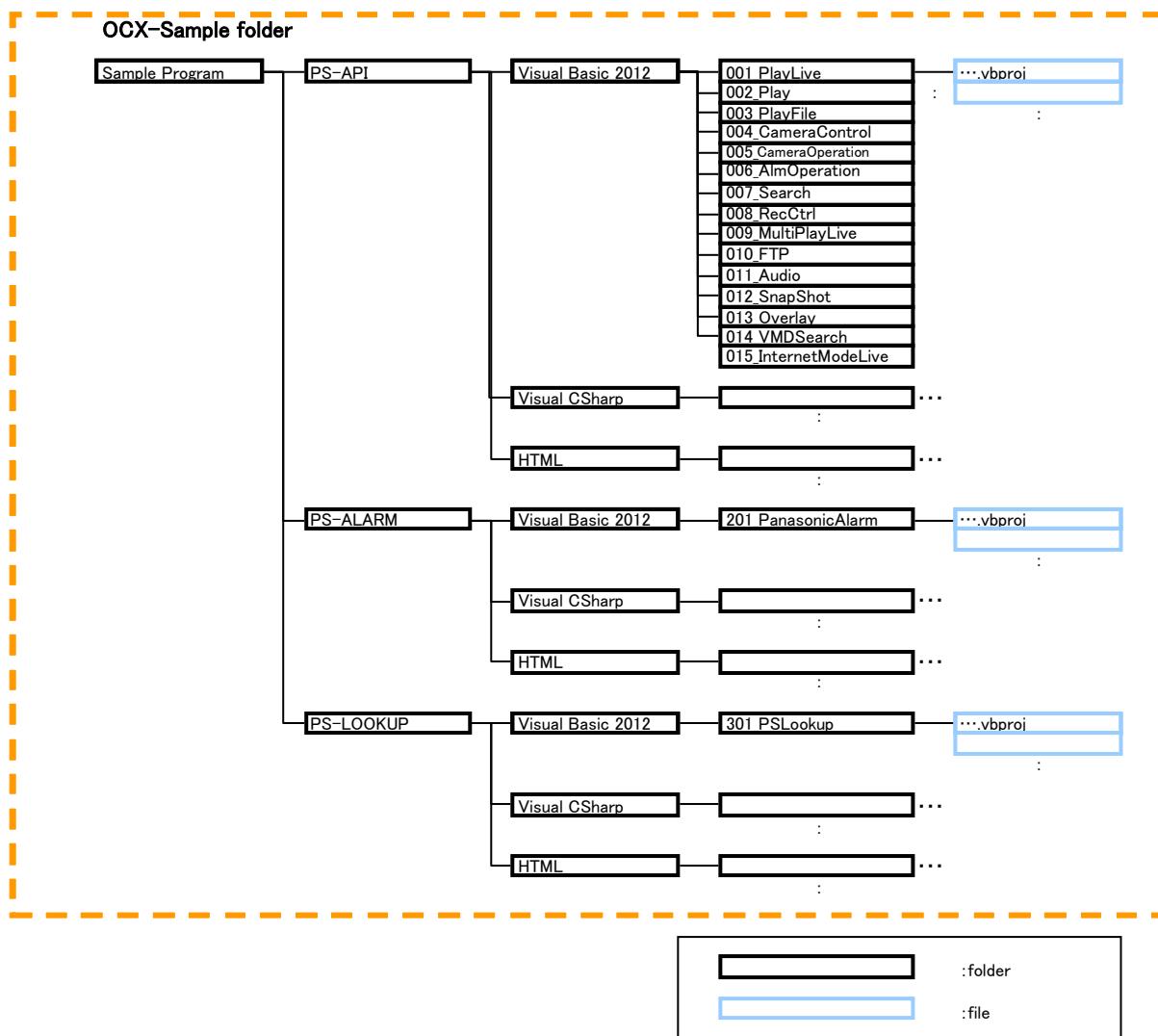


Figure 3-3 The layout of OCX-Sample directory

The overview of files included in each directory is as follows.

Table 3-2 The Overview of Files

Directory Name	Objective
Sample Program	Sample Programs. NOT REDISTRIBUTABLE.

3.1.2. Install Contents

When start to use this SDK, it is necessary to register DirectShow filters.
About the detailed description, refer to “3.2 Install Procedure”.

3.2. PS-API Install

Install this SDK with the following install procedure.

- * When installing the package, it is necessary to login to Windows with Administrator Authority account.
- * If the different version PS-API has been already installed, please uninstall it (please refer to 3.3 PS-API UnInstall), then install the new one.

[Development phase]

- (1) Execute "OCX\PS-API\Setup\setup.exe", and follow the instructions of the installer.
When installing it with default setting, the installer creates "C:\Program Files\Panasonic\PS-API OCX" folder, and then it copies and does registration the PS-API files.

Note :

If Microsoft Visual C++ 2005 Redistributable(Visual C++ Runtime Libraries (x86)),
Microsoft Visual C++ 2012 Redistributable (x86) (Visual C++ Runtime Libraries (x86))
installer runs, please follow the instructions of the installer.

- (2) When completing , reboot the PC to complete the installation.

[Operation phase]

- (1) If Microsoft Visual C++ 2005 Service Pack 1 Redistributable Package doesn't be installed in the target environment, execute "vcredist_x86.exe" that is in "OCX¥PS-API¥Redistributable¥Microsoft Visual C++ 2005 Redistributable Package" to install the runtime component of Visual C++ library.
- (2) If Visual C++ Redistributable for Visual Studio 2012 Update 4 doesn't be installed in the target environment, execute "vcredist_x86.exe" that is in "OCX¥PS-API¥Redistributable¥Microsoft Visual C++ 2012 Redistributable Package" to install the runtime component of Visual C++ library.
- (3) Register DirectShow filters
Copy all files in "OCX¥PS-API¥Redistributable¥bin¥DirectShowFilters" to the optional directory, and execute "00_regist.bat" file at command prompt with Administrator Authority account .

Important :
When a character except the ASCII code is included in a file path, the files may be unable to register correctly.
- (4) Register OCX file.
Copy DLL files (ipropsapi.dll, ipropsapidevice.dll, ipropsapiftp.dll, ipropsapivideo.dll, ipropsapishmlogger.dll), "ipropsapi.ocx", "00_regist.bat" and "00_unregist.bat" in "OCX¥PS-API¥Redistributable¥bin" to the optional directory, and execute "00_regist.bat" file at command prompt with Administrator Authority account .

Important :
When a character except the ASCII code is included in a file path, the files may be unable to register correctly.
- (5) When completing steps (1) - (4), reboot the PC to complete the installation.

3.3. PS-API UnInstall

Uninstall this SDK with the following uninstall procedure.

[Development phase]

- (1) Open “Uninstall a program(Programs and Features)” in “Control Panel”.
- (2) Select " PS-API OCX " from the presently installed programs, and then click "Uninstall".
Follow the uninstaller.
- (3) If necessity, uninstall "Microsoft Visual C++ 2005 Redistributable", "Microsoft Visual C++ 2012 Redistributable (x86)" from “Uninstall a program(Programs and Features)” in “Control Panel”.

Important :

After uninstalling PS-API v12.80 or later, if you want to access the i-Pro device with IE browser or application, uninstall the plug-in software (Network Camera View4S, WebVideoActiveX, etc.) in “Uninstall a program(Programs and Features)” and install it again.

[Operation phase]

- (1) Unregister the OCX file from registry.

Execute "00_unregister.bat" file in "OCX\PS-API\Redistributable\bin" at command prompt with Administrator Authority account .

Important :

When a character except the ASCII code is included in a file path, the files may be unable to register correctly.

- (2) Unregister the DirectShow filters from registry.

Execute "00_unregister.bat" file in "OCX\PS-API\Redistributable\bin\DirectShowFilters" at command prompt with Administrator Authority account .

Important :

When a character except the ASCII code is included in a file path, the files may be unable to register correctly.

- (3) If necessity, uninstall "Microsoft Visual C++ 2005 Redistributable", "Microsoft Visual C++ 2012 Redistributable (x86)" from "Uninstall a program(Programs and Features)" in "Control Panel".

- (4) Delete all files that copied in install.

Important :

After uninstalling PS-API v12.80 or later, if you want to access the i-Pro device with IE browser or application, uninstall the plug-in software (Network Camera View4S, WebVideoActiveX, etc.) in "Uninstall a program(Programs and Features)" and install it again.

3.4. PS-ALARM Install

Install this SDK with the following install procedure.

- * When installing the package, it is necessary to login to Windows with Administrator Authority account.
- * If the different version PS-ALARM has been already installed, please uninstall it (please refer to 3.5 PS-ALARM UnInstall), then install the new one.

(1) Register OCX file.

Copy DLL file (psalarmrcv.dll), "psalarmrcv.ocx", "00_regist.bat" and "00_unregister.bat" in "OCX¥PS-ALARM¥Redistributable¥bin" to the optional directory, and execute "00_regist.bat" file at command prompt with Administrator Authority account .

Important :

When a character except the ASCII code is included in a file path, the files may be unable to register correctly.

(2) When completing steps (1), reboot the PC to complete the installation.

3.5. PS-ALARM UnInstall

Uninstall this SDK with the following uninstall procedure.

- (1) Unregister the OCX filter from registry.

Execute "00_unregister.bat" file in "OCX\PS-ALARM\Redistributable\bin" at command prompt with Administrator Authority account .

Important :

When a character except the ASCII code is included in a file path, the files may be unable to register correctly.

- (2) Delete all files that copied in install.

3.6. PS-LOOKUP Install

Install this SDK with the following install procedure.

- * When installing the package, it is necessary to login to Windows with Administrator Authority account.
- * If the different version PS-LOOKUP has been already installed, please uninstall it (please refer to 3.7 PS-LOOKUP UnInstall), then install the new one.

(1) Register OCX file.

Copy DLL file (pslookup.dll), " pslookup.ocx", "00_regist.bat" and "00_unregister.bat" in "OCX¥PS-LOOKUP¥Redistributable¥bin" to the optional directory, and execute "00_regist.bat" file at command prompt with Administrator Authority account .

Important :

When a character except the ASCII code is included in a file path, the files may be unable to register correctly.

(2) When completing steps (1), reboot the PC to complete the installation.

3.7. PS-LOOKUP UnInstall

Uninstall this SDK with the following uninstall procedure.

- (1) Unregister the OCX filter from registry.

Execute "00_unregister.bat" file in "OCX\PS-LOOKUP\Redistributable\bin" at command prompt with Administrator Authority account .

Important :

When a character except the ASCII code is included in a file path, the files may be unable to register correctly.

- (2) Delete all files that copied in install.

4. Support

4.1. Edge IE mode

Please Use Edge IE mode for HTML Sample Program.

4.1.1. Preparation

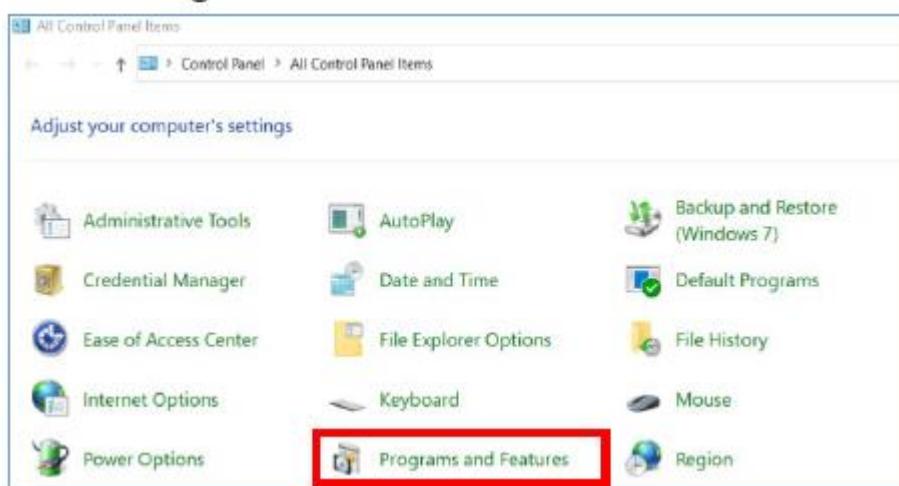
[Check items]

- Confirm that the version of Microsoft Edge is 93.0.961.47 or later.
- Internet Explorer 11 needs to be enabled on the PC setting. Not required for Windows 11.
- Microsoft Edge IE mode is not available on Windows 8.1 or earlier PC.
- Contact your PC administrator when IE mode cannot be enabled due to the security setting on your PC.

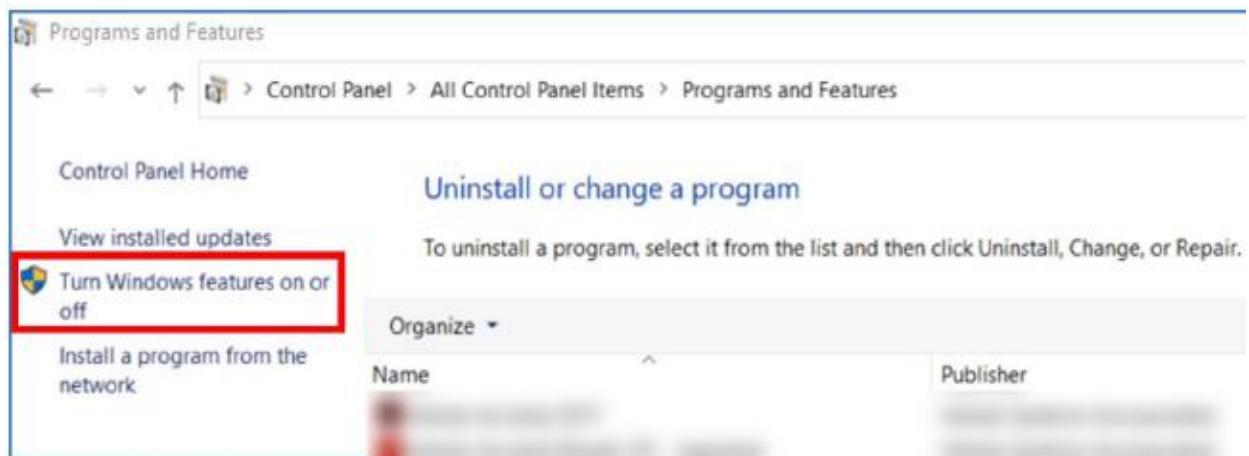
Note that this procedure may not work if conditions are not satisfied.

4.1.2. How to check whether Internet Explorer 11 is enabled or not on PC

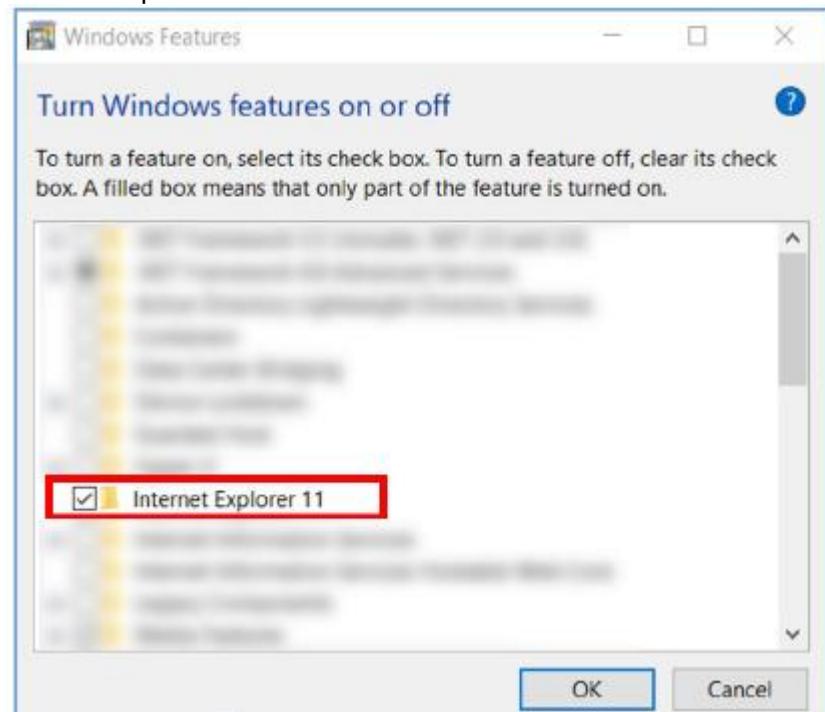
1. Open Control Panel on PC
2. Click “Programs and Features”



3. Select “Turn Windows features on or off” under Control Panel Home



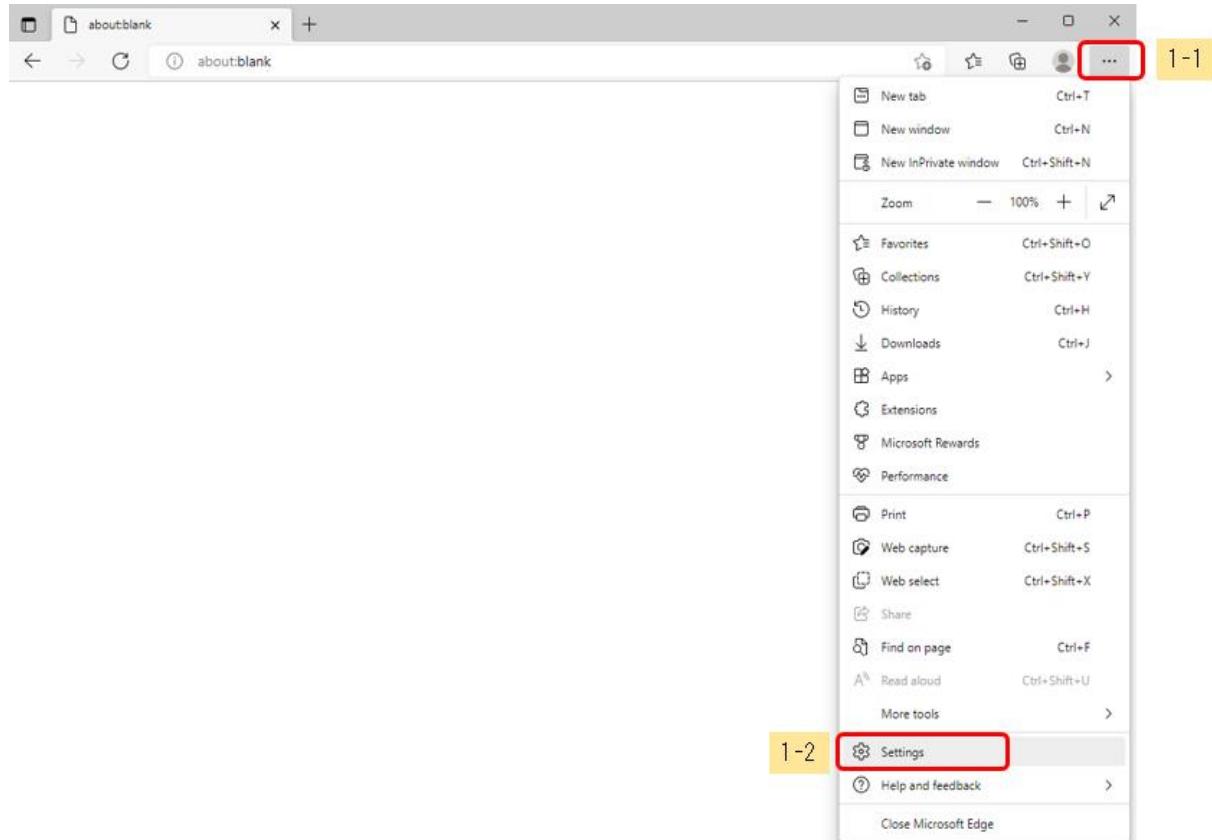
4. Internet Explorer 11 is enabled when it is checked



4.1.3. How to use Edge IE mode

1. Preparation Edge settings

- 1-1. Click the menu icon on Microsoft Edge browser
- 1-2. Select "Settings"



1-3. Select “Default browser”

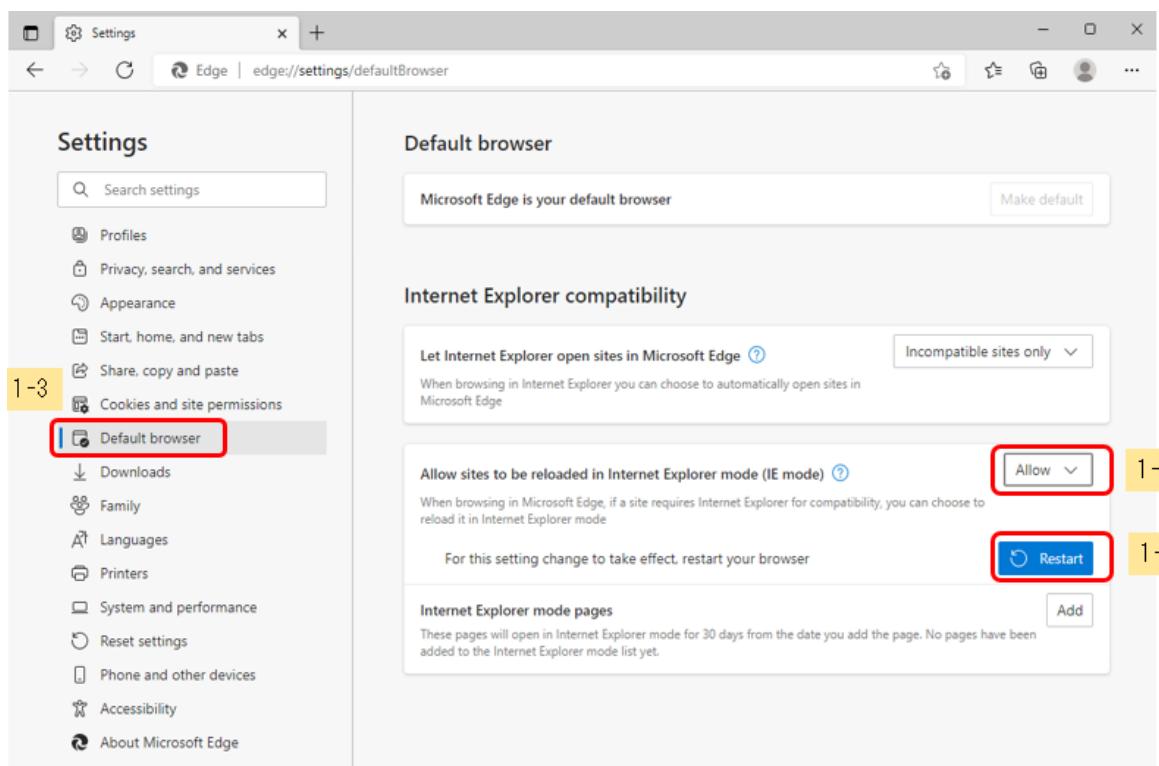
Click the menu icon “≡” on the “Settings” page when setting menu is not expanded

1-4. Select “Allow” for “Allow sites to be reloaded in Internet Explorer mode” under “Internet Explorer compatibility” section

Note:

Contact your PC administrator when IE mode cannot be enabled due to the security setting

1-5. Click the “Restart” button



2. Start in Edge ie mode
 - 3-1. Launch the HTML sample program in Microsoft Edge
 - 3-2. Click the menu icon
 - 3-3. Select “Reload in Internet Explorer mode”

