USAGE NOTES

YASKAWA

Title: SigmaWin+ Version 7 Usage Notes

Product(s): SigmaWin+ Version 7.42 | **Doc. No.** SigmaWinPlus_Ver.7

About This Document

This document provides information related to the installation and usage Yaskawa's SERVOPACK Engineering Tool SigmaWin+ version 7.42 for Sigma-series AC SERVOPACKs. Read and understand this document to ensure the correct usage of SigmaWin+.

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1. System Requirements

The computer to install and use SigmaWin+ requires the following specifications.

Specification	Requirement
Operating System	Microsoft Windows 7 SP1[*1] 64-bit / 32-bit Windows 8.1[*1*2] 64-bit / 32-bit Windows 10 64-bit / 32-bit Windows 11 64-bit
Processor	1 GHz or better
RAM	1 GB or more
Hard Drive Space	1 GB or more
Display	1280 × 720 (minimum)
Language	English, Chinese (Simplified Chinese), Japanese
Software	.NET Framework 4.6.2 or later (included in SigmaWin+ compressed archive as NDP462-KB3151800-x86-x64-AllOS-ENU.exe)
	Internet browser that supports HTML5 (For example: Microsoft Internet Explorer 9)

*1 KB2999226 (Update for Universal C Runtime) must be installed.

*2 KB2919442 and KB2919355 must also be installed in order to install KB2999226.

Software	URL
KB2919442	https://support.microsoft.com/en-us/help/2919442/march-2014-servicing-stack-update-for-windows-8-1-and-windows-server-2
KB2919355	https://support.microsoft.com/en-us/help/2919355/windows-rt-8-1--windows-8-1--and-windows-server-2012-r2-update-april-2
KB2999226	https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows

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2. Upgrading Information

The below information describes the change of computer requirements in order to use this version of SigmaWin+.

1. .NET Framework Requirement Change
    a. SigmaWin+ Version 7.23 to 7.26 required Microsoft .NET framework 4.5.2 or 4.6.
    b. SigmaWin+ Version 7.27 and newer requires Microsoft .NET framework 4.6.2.

3. Installation Instructions

Below are the steps to follow to install SigmaWin+.

1. Confirm that the computer meets the system requirements defined in 1. System Requirements.
2. If a previous version of SigmaWin+ version 7 exists, then uninstall it.
   - Note: SigmaWin+ version 5 can coexist with SigmaWin+ version 7. SigmaWin+ version 5 does not need to be uninstalled.
   - When uninstalling, when prompted to "*Select the items to uninstall in addition to SigmaWin+ Version 7*", always select "**Model information files**"
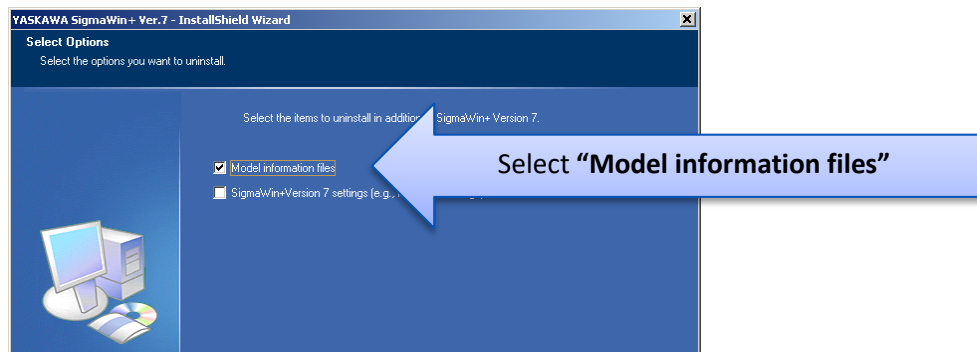
3. Extract the entire contents, maintaining the directory structure, of the SigmaWin+ compressed archive (*.zip file).
4. If not already installed, run and install .NET framework 4.6.2 **NDP462-KB3151800-x86-x64-AllOS-ENU.exe**. This is included in the SigmaWin+ compressed archive.
   - Note: If SigmaWin+ is installed to PC without installing .NET Framework to it, errors may occur and SigmaWin+ will not installed.
   - Note: .NET Framework is produced by Microsoft. For details, refer to the following:

Item	URL
.NET Framework Details	https://www.microsoft.com/en-us/download/details.aspx?id=53344
.NET Framework Versions and Dependencies	https://msdn.microsoft.com/en-us/library/bb822049(v=vs.110).aspx
.NET Framework System Requirements	https://msdn.microsoft.com/en-us/library/8z6watww(v=vs.110).aspx

5. Run and install **SigmaWinPlus7_installer.exe** from the extracted SigmaWin+ archive.

4. Additional Installation Notes

Below are notes related to the installation of SigmaWin+

The following programs are installed if a newer version does not already exist on the computer:

Name	Publisher	Size	Version
Microsoft Access database engine 2010 (English)	Microsoft Corporation	108 MB	14.0.7015.1000
Microsoft Primary Interoperability Assemblies 2005	Microsoft Corporation	7.75 MB	9.0.21022

Note: Uninstalling SigmaWin+ does not uninstall these programs.

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5. Release Notes

Note: Previous release notes are found at:
`<Directory of extracted SigmaWin+ .zip archive>\Previous Release Notes\`

Refer to the table below for information about changes to SigmaWin+.

SigmaWin+ Version 7.42 (upgrade from version 7.40):

#	Item	Category	Description
1	Supported OS	Additions	Windows 11 is now supported.
2	Supported Product	Additions	Σ-MD EtherCAT is now supported.
3	Mechanical Analysis	Additions	• Up to 10 previous results from performing Mechanical Analysis are now available to be displayed from the history dialog box. • Printing superposed graphs is now possible.
4	Trace	Improvements and Corrections	• The position of the pre-trigger on the graph is no longer slightly different than the set value. • When the pre-trigger set value is changed to 0, the display of the trigger position on the graph now updates to 0 from the previous position. • The cursor values are now completely displayed. • The batch export destination folder is no longer set to the default value each time (the previous save destination is now retained).
5	Edit Parameters	Improvements and Corrections	• The name of PnB24 bits 20 to 24 (SO1 to SO5) now matches the name in the SERVOPACK manual. • The name of Pn475 now matches the name in the SERVOPACK manual. • PnB02 and PnB04 no longer display as "Reserved". • Σ-7 EtherCAT parameter PnB9C is now displayed. • Pn50D.0 and Pn50D.3 contents are now correct (applies to SGDV-□□E[S/P]1 models). • Pn550 and Pn553 are now displayed (applies to SGDV-□□E[1/2]1 models).
6	Ripple Compensation	Improvements and Corrections	• Ripple Compensation is now correctly performed after closing the function with the X button after clicking "Write to Servo". Previously, if closing the Ripple Compensation function with the X button, the SERVOPACK would be in the state before the Ripple Compensation was executed. Note: The related parameter is Pn423.0. • When measuring the speed ripple with the Reverse button, the compensation effect of the speed ripple is now improved.
7	Safety Module	Improvements	Improved the function to clear A.EC0 and A.EC1.
8	Scan	Improvements	An error could be reported when attempting to connect to a SERVOPACK though a controller if Microsoft Visual C++ Redistributable was not installed. The installer now installs this component.

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| #	Item	Category	Description
9	Setup Wizard	Corrections	• The Pn20A formula is now correct when a round table mechanical structure is selected with the setting to use a fully-closed encoder. The formula was: "sine wave pitch (cycle) count per load shaft rotation" ÷ "gear ratio" The formula is now: "sine wave pitch (cycle) count per load shaft rotation" × "gear ratio" • Σ-7 EtherCAT parameters for electronic gear ratio for a (CoE) communications references SERVOPACK are now correct (was Pn20E and Pn210, is now PnB02 and PnB04). • Σ-7 EtherCAT formula for electronic gear ratio is no longer missing "× 1/16" when set to not to use a fully-closed encoder. • When the mechanical structure is belt and pulley, and the pulley diameter is set, the pitch formula is now correct (was "pulley diameter" ÷ π, is now "pulley diameter" × π). This is now also corrected for "rack and pinion" and "roll feed".

6. Installation Troubleshooting

6.1. **Symptom:**

Windows Message:

YASKAWA SigmaWin+ Ver.7
One or more files required for installation are missing. Check the information on SigmaWin+ installation in the ReadMe file and install the SigmaWin+ again.
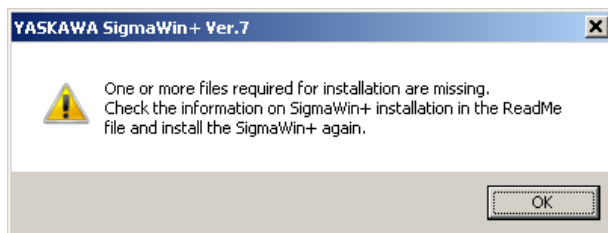
Causes:

1. The SigmaWinPlus7_installer.exe file and the AppendFiles folder are not in the same directory.
2. The SigmaWinPlus7_installer.exe was launched from the SigmaWin+ compressed archive (the archive was not completely extracted).

Remedy:

Extract the entire contents of the SigmaWin+ compressed archive, preserving the directory structure, and then run the SigmaWinPlus7_installer.exe executable file. An example of the contents extracted preserving the structure is as follows:

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6.2. **Symptom:**

Program Message: Microsoft .NET 2015: Installation Did Not Succeed
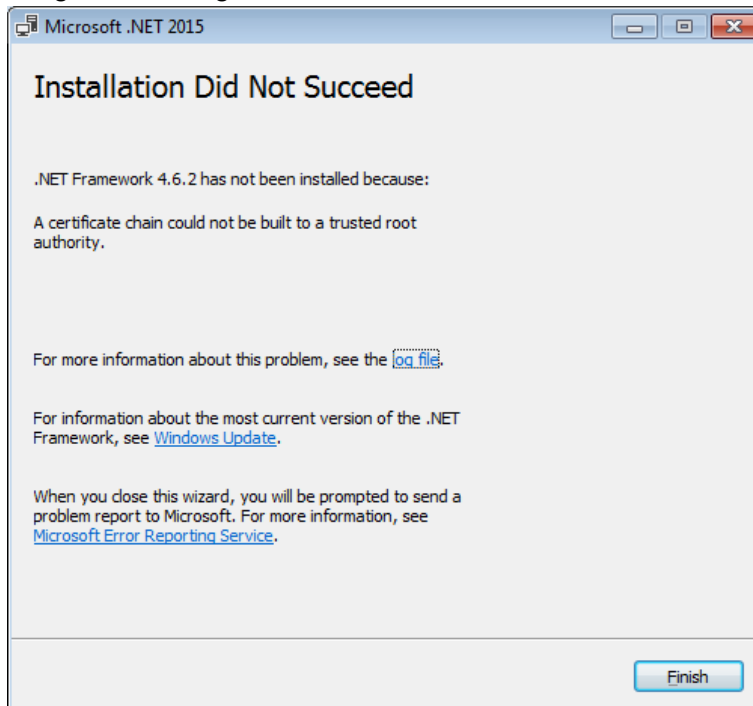
Cause:

The above error may result when installing .NET Framework 4.6.2 if the operating system is Windows 7 SP1, and the computer is offline, or in an environment where updates cannot be downloaded and installed from Windows Update.

Remedy:

Download and install the certificate to install .NET Framework 4.6.2 successfully. Refer to: https://blogs.msdn.microsoft.com/jpvsblog/2016/10/04/ndp462-offline-install/

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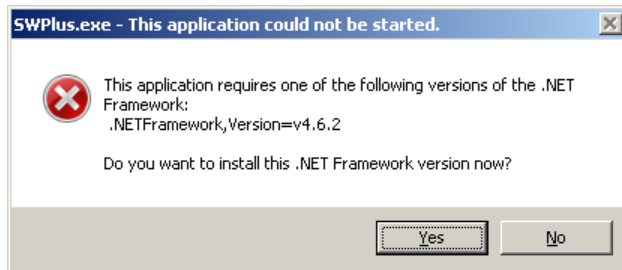| **Title:** SigmaWin+ Version 7 Usage Notes	
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7. Program Launch Troubleshooting

7.1. **Symptom:**

Windows Message:

SWPlus.exe – This application could not be started.
This application requires one of the following versions of the .NET Framework: .NET Framework,Version=v4.6.2 Do you want to install this .NET Framework version now?

Cause:

When launching SigmaWin+, if the .NET Framework 4.6.2 is not installed, the error message will appear.

Remedy:

Install the .NET Framework 4.6.2 as described in 3. Installation Instructions.

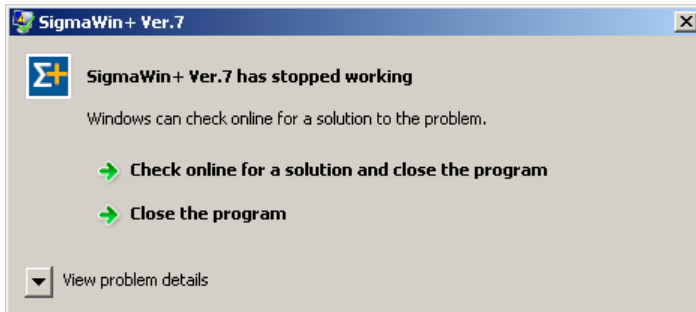# USAGE NOTES

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7.2. **Symptom:**

Windows Message: SigmaWin+ Ver.7: SigmaWin+ Ver.7 has stopped working

Cause:

When launching SigmaWin+, if KB2999226 (Update for Universal C Runtime) is not present. This software is a requirement for SigmaWin+.

Remedy:
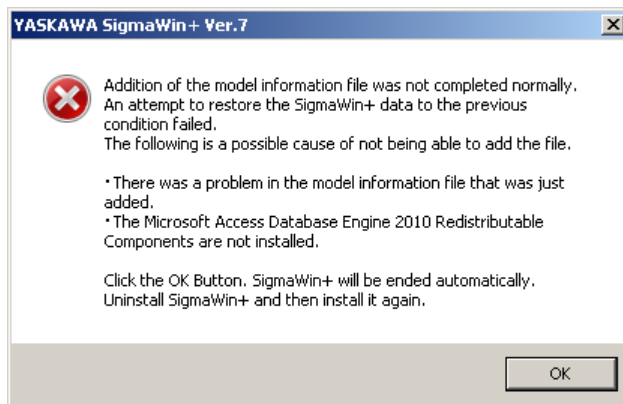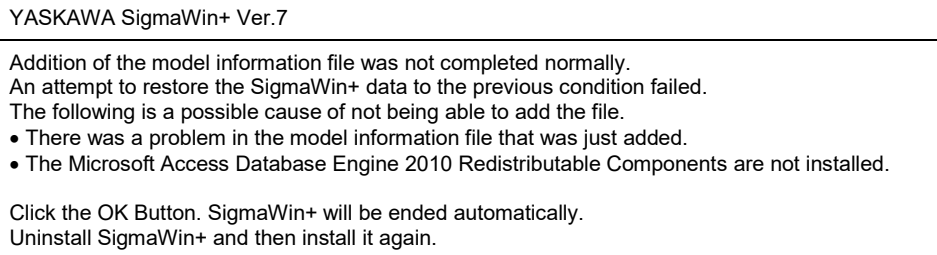
Install KB2999226 as referenced in 1. System Requirements.

7.3. **Symptom:**

Program Message:

YASKAWA SigmaWin+ Ver.7
Addition of the model information file was not completed normally. An attempt to restore the SigmaWin+ data to the previous condition failed. The following is a possible cause of not being able to add the file. • There was a problem in the model information file that was just added. • The Microsoft Access Database Engine 2010 Redistributable Components are not installed. Click the OK Button. SigmaWin+ will be ended automatically. Uninstall SigmaWin+ and then install it again.

Cause:

The model information file database could not be complied by Microsoft Access Database components because:

A) The Microsoft Access Database Engine 2010 was removed or was not installed automatically by SigmaWin+. Refer to 4. Additional Installation Notes for details on the Microsoft Access Database Engine 2010 that SigmaWin+ automatically installs.

B) The Microsoft Access Database Engine that exists on the computer cannot be used by SigmaWin+.

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Remedy:

1. Reinstall SigmaWin+. If problems still occur, install the Microsoft Access Database Engine before installing SigmaWin+. The Microsoft Access Database Engine can be obtained from Microsoft.

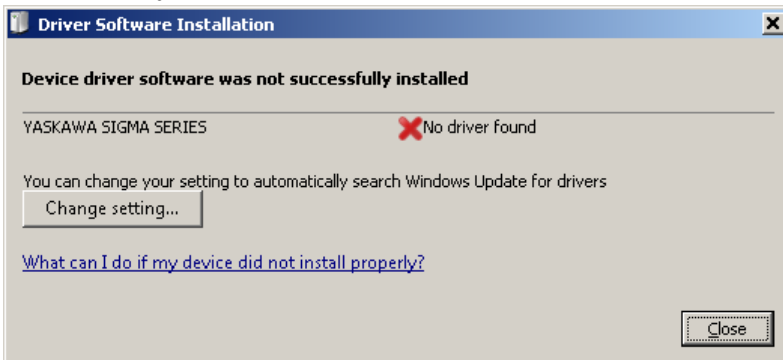2. Follow the steps described in the Solution Center regarding this Issue. https://solutioncenter.yaskawa.com/selfservice/viewdocument.do?externalId=12916

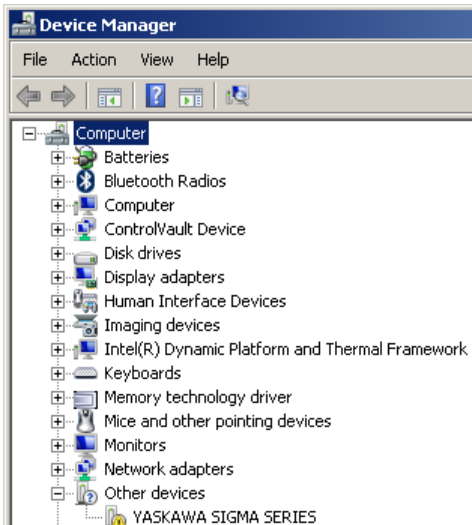## 8. Program Usage Troubleshooting

8.1. **Symptom:**

Windows Message: Driver Software Installation: Device driver software was not successfully installed

OR:

"YASKAWA SIGMA SERIES" appears in Device Manager in the category "Other devices"
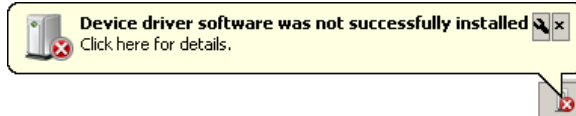
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OR:

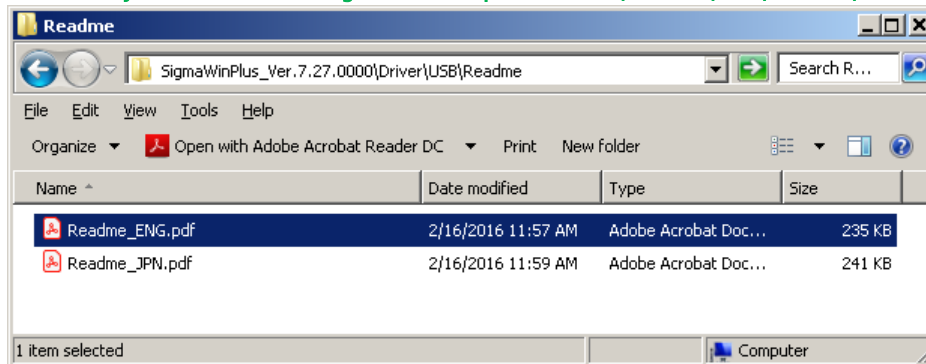"Device driver software was not successfully installed" appears in the Windows system tray.

Cause:

When connecting a SERVOPACK to the computer with a USB cable, the Windows message appears. The USB driver for the SERVOPACK is not installed.

Remedy:

Install the USB driver for the Sigma Series SERVOPACK. Instructions are found at:
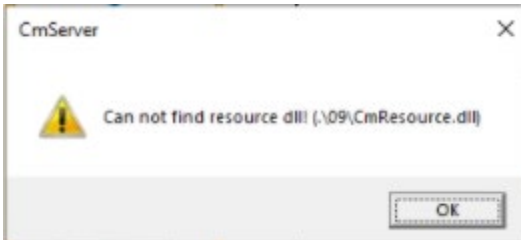`<Directory of extracted SigmaWin+ .zip archive>\Driver\USB\Readme\Readme_ENG.pdf`

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8.2. **Symptom:**

SigmaWin+ Message: CmServer: Can not find resource.dll! (.\09\CmResource.dll)

Cause:

SigmaWin+ did not install the Microsoft Visual C++ Redistributable.

Remedy:

Install the Microsoft Visual C++ Redistributable found at:
`<Directory of extracted SigmaWin+ .zip archive>\ISSetupPrerequisites\vcredist_x86.exe`
Alternatively, obtain and install the **X86 version** from Microsoft:

https://docs.microsoft.com/en-us/cpp/windows/latest-supported-vc-redist?view=msvc-170

Architecture	Link	Notes
ARM64	https://aka.ms/vs/17/release/vc_redist.arm64.exe	Permalink for latest supported ARM64 version
X86	https://aka.ms/vs/17/release/vc_redist.x86.exe	Permalink for latest supported x86 version
X64	https://aka.ms/vs/17/release/vc_redist.x64.exe	Permalink for latest supported x64 version. The X64 Redistributable package contains both ARM64 and X64 binaries. This package makes it easy to install required Visual C++ ARM64 binaries when the X64 Redistributable is installed on an ARM64 device.

Note: The X64 version does not resolve this issue.

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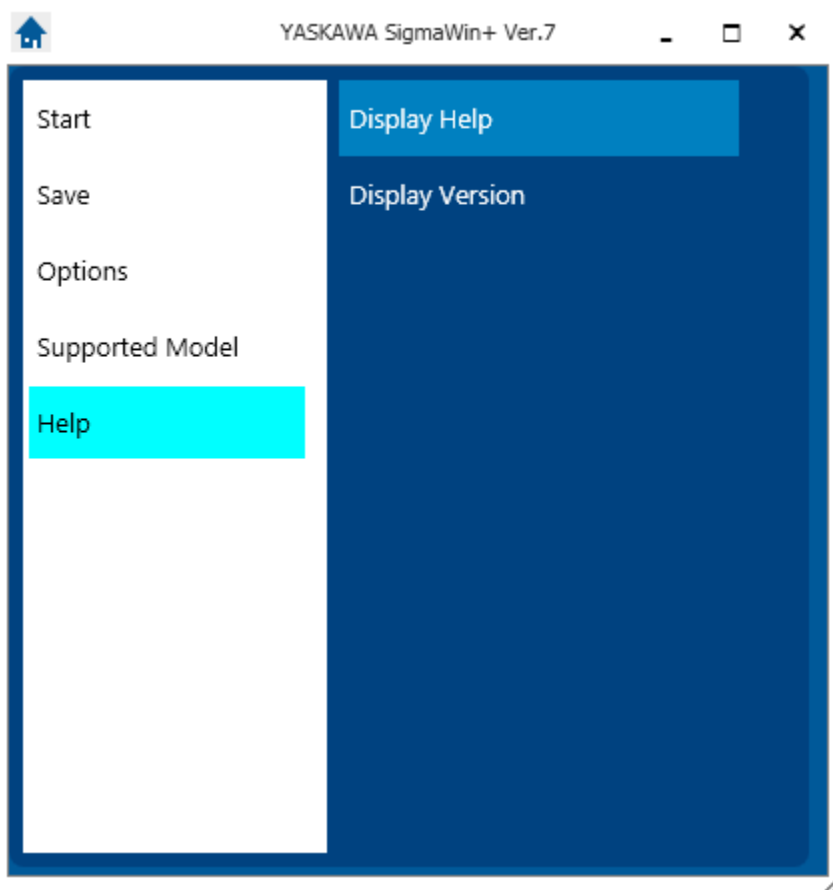| **Product(s):** SigmaWin+ Version 7.42	**Doc. No.** SigmaWinPlus_Ver.7

8.3. **Symptom: (All other symptoms not described in this document)**

Remedy:

Refer to SigmaWin+ Help.

The Help can be found by launching SigmaWin+ and selecting the menu as shown:

Alternatively, the help file can be viewed in an HTML5-compatible browser.

The default location of the help file is at:

`C:/Program Files (x86)/YASKAWA/SigmaWinPlus7/Help/SigmaWinV7Help.html`

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If SigmaWin + is not yet installed, the help file can be accessed by extracting the archive and viewing the HTML file.

The help file archive is located at:

`<Directory of extracted SigmaWin+ .zip archive>\SIETS80000134*.zip`

`Note: * denotes wildcard`