

In-Sight® Explorer 5.7.1 Release Notes

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Overview

This document describes the In-Sight Explorer software, including the following topics:

- [System Requirements](#)
- [Changes & Fixes](#)
- [Known Issues](#)

Note: Visit the [In-Sight Online Support Center](#) to download the latest release notes and documentation, including localized editions. To access the updated documentation from the In-Sight Explorer user interface and Microsoft® Windows® Start menu, complete the following steps:

1. Log on to the PC with administrative privileges.
2. Copy the downloaded documentation to the appropriate location in the installation directory. The default location is: C:\Program Files (x86)\Cognex\In-Sight\In-Sight Explorer 5.x.x\Documentation.

System Requirements

This section describes system requirements for In-Sight Explorer software.

PC Hardware Minimum Requirements

The following minimum hardware requirements are for PCs that are connected to a single low-resolution In-Sight vision system running at a slow production speed:

- Intel® Celeron® 1000M processor running at 1.8GHz (or equivalent)
- 2GB of available RAM
- 4GB of available hard-disk space
- Video card that can display 1024 x 768 resolution at 24-bit color depth (the DPI Display setting must be set to 96 DPI)
- Network interface card (at least 100Mbps) for connecting to an In-Sight vision system

PC Hardware Recommended Requirements

The following recommended hardware requirements are for PCs that are simultaneously connected to up to four In-Sight vision systems:

- Intel Core™ i7 processor running at 2.7GHz (or equivalent)
- 4GB of available RAM
- 8GB of available hard-disk space
- Video card that can display 1920 x 1080 resolution at 32-bit color depth (the DPI Display setting must be set to 96 DPI)
- Gigabit network interface card for connecting to In-Sight vision systems

Operating System Requirements

In-Sight software has been tested on the following operating systems:

- Microsoft Windows 10 Professional (64-bit)
- Microsoft Windows 7 Professional, Service Pack 1 (64-bit)
- Microsoft Windows Server 2016

Although you can install and run In-Sight Explorer on other Windows operating systems, PCs that do not meet the preceding requirements are not officially supported.

Supported Languages

- Chinese (Simplified)
- English
- French
- German
- Japanese
- Korean
- Spanish (European)

Firmware Version Support

In-Sight 5.7.1 software contains three firmware versions:

- In-Sight 5.7.1
- In-Sight 5.3.3
- In-Sight 4.10.5 PR1

In-Sight vision systems that have older firmware versions might work properly. However, some features are unsupported with older firmware versions and are not fully tested. For optimal performance, update vision systems that run older firmware to the most recent, supported firmware versions. For a list of models and supported firmware versions, see the Firmware Versions topic in the *In-Sight® Explorer Help* file.

In-Sight Firmware 5.7.1

- In-Sight 2000 series vision sensors
- In-Sight 5705 and 5705C vision systems
- In-Sight 7000 Gen2 series vision systems
- In-Sight 8000 series vision systems
- In-Sight 9000 series vision systems

In-Sight Firmware 5.3.3

- In-Sight Advantage Engine

In-Sight Firmware 4.10.5 PR1

- In-Sight Micro 1000 series vision systems
- In-Sight 5000 series vision systems (except In-Sight 5705 and 5705C vision systems)
- In-Sight 7000 series vision systems (except In-Sight 7000 Gen2 series vision systems)

Microsoft .NET Framework 4.5

In-Sight software requires Microsoft .NET Framework 4.5. If the In-Sight software installer fails to detect Microsoft .NET Framework 4.5, it attempts to download and install it.

Note: If you attempt to install In-Sight Explorer on a system with Microsoft .NET Framework 3.5 disabled while Windows updates are being installed, you may receive the following error message: Error installing Microsoft .NET Framework; Error code 0x800f081f. If this occurs, wait for the Windows updates to complete, reboot if necessary, and then install In-Sight Explorer.

Changes & Fixes

Note:

- For changes and fixes in previous releases, see past In-Sight Explorer release notes. Release notes for previous 5.x.x releases are available in the *In-Sight Explorer® Help* file.
- The release notes include issue numbers (where applicable) to better track known issues reported by Cognex Technical Support.

Issue#	Change/Fix	Applicable Firmware Version
IS-556	Added a Filter search box to the Palette in the Spreadsheet view, to quickly find a specific function or snippet.	N/A
IS-555	The Job Server is now supported for In-Sight 2000 vision sensors. The Job Server is used to configure an FTP server to host In-Sight job files for the vision sensor. This allows another device, such as a PLC or robot controller, to use the Load File (LF) and Store File (TF) Native Mode commands to change jobs without specifying a location.	5.7.1
IS-533	If the ValidateIDDData function (ID > ValidateIDDData) is referencing a ReadIDMax function (ID > ReadIDMax) that reads an invalid symbol, the GetDiagnosticString function now returns #ERR. Previously, this function may have returned "Data validated successfully", even if the symbol was invalid.	5.7.1
IS-532	When the In-Sight 9912 vision system is connected to the CIO-MICRO I/O module, line 12 (Pass/Fail LED) and line 13 (Error LED) are now properly displayed and configurable from the Discrete I/O Settings dialog in the Spreadsheet view and from the Discrete Inputs/Outputs application step in the EasyBuilder view. Previously, these lines were not displayed and could not be configured.	5.7.1
IS-482	When using the BeadFind function (Vision Tools > InspectEdge), if the bead sample location is found and the bead path edited using the Edit Bead Path parameter, the modified bead path is now properly retained. If using In-Sight 5.7.0 firmware, the modified bead path was not retained and reverted to the original, pre-edited bead path.	5.7.1
IS-467	When connected to the In-Sight 2000-23M and using the EasyBuilder Angle tool (Measurement Tools > Angle) to measure the angle between two edge features, the correct angle value is now returned. Previously, the angle value may have incorrectly returned 0.00.	5.7.1
IS-460	When using the WriteImageFTP function (Input/Output > Network) in the Spreadsheet view or exporting images via FTP (Communications > FTP) in the EasyBuilder view, the resolution of the exported image is now correct (Full, Quarter or Half). Previously, the resolution of the exported image did not match the setting specified within In-Sight Explorer.	5.7.1
IS-455	If the Modbus TCP Server dialog is launched from the Network Settings dialog and the vision system rebooted for network changes to take effect, the settings in the Modbus TCP Server dialog are still accessible and can be modified. Previously, after the vision system was rebooted, these settings were grayed out and could not be modified.	5.7.1

Issue#	Change/Fix	Applicable Firmware Version
IS-436	<p>GS1 Application Identifiers 91 - 99 has been improved to support data fields with a maximum of 90 alpha-numeric characters, which is compliant with the GS1-128 application standard. Previously, a maximum of 30 alpha-numeric characters was supported. The following improvements have been made for the IDValidate Vision Data Access functions (Vision Data Access > IDValidate):</p> <ul style="list-style-type: none"> • The GetAIDescription, GetFieldData and GetFieldIdentifier functions now return the expected values. Previously these functions returned #ERR for all identifiers. • The GetDataFormat function now returns the format used for encoding data. Previously this function returned #ERR. • The GetDiagnosticString function now returns "Data validated successfully." Previously, this function returned "Invalid field separator." • The GetNumFields function now returns the number of fields encoded in the data. Previously this function returned #ERR. • The GetValid function now returns a 1, indicating the data is valid. Previously, this function returned a 0, indicating the data was invalid. 	5.7.1
IS-399	When In-Sight Explorer is installed to a PC that is not connected to a network and an Offline Programming Key has been entered in the Options dialog, the emulator can now be connected to. For In-Sight Explorer 5.7.0, if all Ethernet network cards were disabled on the PC or if a wireless adapter was enabled but not connected to a network, the emulator could not be connected to.	N/A
IS-364	When using the TrainPatMaxRedLineColor or FindPatMaxRedLineColor functions (Vision Tools > Pattern Match) and the External Region parameter is referencing an EditCompositeRegion function (Graphic Functions > Controls) or if the region is rotated, the pattern is now properly found. Previously if referencing an EditCompositeRegion function or the region was rotated, the pattern may not have been found.	5.7.1

Known Issues

Note: The release notes include issue numbers (where applicable) to better track known issues reported by Cognex Technical Support.

Issue#	Issue	Affected Firmware Version
IS-334	<p>When you try to connect your vision system/sensor to the Web HMI for the first time, you may receive an error message: Permission error appears and connection is denied.</p> <p><i>Workaround:</i> Before you connect your vision system/sensor to the Web HMI, reinstall or update the vision system/sensor firmware on the system.</p>	5.7.0, 5.6.1 & 5.6.0
48478	If an In-Sight vision system that runs firmware 5.6.0 has a job with many instances of the ReadIDMax function, the job might require more memory than is available on the vision system. Any instances of the ReadIDMax function that exceed the available memory returns #ERR. For example, if an In-Sight 8405 vision system job contains more than 100 instances of the ReadIDMax function, you might encounter this problem.	5.7.1
45581	For In-Sight 7600/7800 series and 9902L vision systems configured for CIP-Sync/PTP, 1588 synchronization accuracy through a transparent clock-switch might increase to more than 10µs offset from master.	5.7.1
42550	In-Sight models that run 5.1.0 and later firmware versions do not support In-Sight Track & Trace job files.	5.7.1
35828	If an industrial Ethernet communication protocol triggers the vision system, the JobPass signal is sent only if the job contains a WriteResultsBuffer function. This issue does not occur with EasyBuilder applications.	5.7.1

Issue#	Issue	Affected Firmware Version
32479	<p>If you update the In-Sight vision system firmware while it is connected to a POWERLINK network, it results in a code 13710, with the vision system needing to be power cycled and the files restored (the firmware will be successfully updated, however).</p> <p><i>Workaround:</i> Before you update the vision system firmware, complete the following steps:</p> <ol style="list-style-type: none">1. Remove the vision system from the POWERLINK network, and connect the vision system to a network port on the same subnet as the computer that runs In-Sight Explorer.2. Power cycle the vision system.3. Update the firmware while the vision system in Ethernet mode.4. Place the vision system back onto the POWERLINK network.5. Power cycle the vision system.	4.10.5 PR1