

## Increase Development and Debugging Efficiency with Various Debugging Tools, Including Functions That Are Not Possible on the Actual PLC

- Application software to simulate SYSMAC CS/CJ/CP/NSJ-series CPU Unit operation on the computer to debug PLC programs without a CPU Unit.

**Note:** 1. The CX-Simulator is included in the CX-One FA Integrated Tool Package. It can not be purchased separately.  
2. NSJ-series is no longer available to order.



## Features

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- Apply virtual external inputs to a virtual CPU Unit to debug programming.
- Execute programs by steps or with break point settings, or use any of the many other debugging functions.
- Check the cycle time during simulation.
- Debug network communications and serial communications as well.

## Ordering Information

Product name	Specifications			Model
		Number of Licenses	Media	
<b>FA Integrated Tool Package CX-One Ver.4.□</b>	<p>The CX-One is a package that integrates the Support Software for OMRON PLCs and components.</p> <p>CX-One runs on the following OS. Windows 7 (32-bit/64-bit version) / Windows 8 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version)</p> <p>CX-One Ver.4.□ includes CX-Simulator. For details, refer to the CX-One catalog (Cat. No. R134).</p>	1 license *	DVD	<b>CXONE-AL01D-V4</b>
<b>FA Integrated Tool Package CX-One Lite Ver.4.□</b>	<p>CX-One Lite is a subset of the complete CX-One package that provides only the Support Software required for micro PLC applications.</p> <p>CX-One Lite runs on the following OS. Windows 7 (32-bit/64-bit version) / Windows 8 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version)</p> <p>CX-One Lite Ver.4.□ includes CX-Simulator.</p>	1 license	DVD	<b>CXONE-LT01D-V4</b>

**Note:** The CX-One and CX-One Lite cannot be simultaneously installed on the same computer.

\* Multi licenses (3, 10, 30, or 50 licenses) and DVD media without licenses are also available for the CX-One.

## Product Configuration

Setup disk : (DVD) DVD 1 piece in the case  
 Guidance : A4 size, English / Japanese  
 User license agreement / User registration card, English / Japanese

# Main Functions

Category		Function
<b>Ladder program execution</b>		Execute continuously
		Execute a single scan
		Scan continuously
		Execute a single step
		Execute steps continuously
		Pause the program execution
		Stop the program
		Repeat scan from the beginning
		Reset
		Execute function block program
		Execute ST program
		Execute SFC program
	<b>Program debugging</b>	
		Stop the program at a break point
		Set/Reset start point
		Start program from a start point
		Set/Reset I/O break conditions
		Stop the program when the I/O break conditions are satisfied
		Execute a single task
		Execute an interrupt task
		Set virtual I/O refresh time at the Unit Registration
		Set each cycle time (virtual cycle time/PC cycle time)
<b>Monitor the status</b>		Display CPU error status
		Display FAL/MSG messages
		Display alarms
		Display cycle time details
		Display each status of the task
<b>Set serial communications settings</b>		Display the contents of output by the serial communications commands
		Send/Receive the serial communications commands to/from the external devices
		Connect PT with NT Link
<b>Set network communications settings</b>		Display the contents of output by the network communications commands
		Sending FINS commands to and receiving FINS commands from a virtual PLC running on a computer using SEND and RECV instructions.
		Receive the FINS commands from external PLCs and computers
		Execute command log
<b>Execute virtual external input</b>		Execute program in Debug UM
		Start command log
		Start CX-Programmer date trace file
		Start CX-Programmer time chart monitor file
		Set I/O conditions
	Execute I/O conditions	
<b>Integrated simulation</b>		PLC-PT Integrated Simulation
<b>PLC Error simulator</b>		PLC Error Simulator (CS/CJ/CP series)
<b>Other tools</b>	<b>Data trace recording tool</b>	Execute date trace continuously
	<b>Multipoint data collection tool</b>	Collect data from the actual PLC

## System Requirements

The system requirements are the same as those for the CX-One. (The CX-Simulator is included in the CX-One.)  
For details, refer to the FA Integrated Tool Package CX-One Datasheet.

## Applicable Units

CX-Simulator can be used with SYSMAC CS/CJ/CP/NSJ-series.  
**Note:** Including models no longer available to order.

## Applicable Models

Series	Unit
CS	CS1H-CPU63/64/65/66/67 CS1G-CPU42/43/44/45 CS1H-CPU63H/64H/65H/66H/67H CS1G-CPU42H/43H/44H/45H CS1D-CPU65H/67H/67HA/68HA CS1D-CPU42S/44S/65S/67S/44SA/67SA
CJ	CJ1G-CPU44/45 CJ1H-CPU65H/66H/67H/64H-R/65H-R/66H-R/67H-R CJ1G-CPU42H/43H/44H/45H CJ1M-CPU11/12/13/21/22/23 CJ2H-CPU64-EIP/65-EIP/66-EIP/67-EIP/68-EIP CJ2H-CPU64/65/66/67/68 CJ2M-CPU11/12/13/14/15/31/32/33/34/35
CP	CP1H-XA40DR-A/XA40DT-D/XA40DT1-D/X40DR-A/X40DT-D/X40DT1-D/Y20DT-D CP1L-M60DR-A/M60DR-D/M60DT-A/M60DT-D/M60DT1-D/M40DR-A/M40DR-D/M40DT-A/M40DT-D/M40DT1-D/M30DR-A/M30DR-D/ M30DT-A/M30DT-D/M30DT1-D CP1L-EL20DR-D/EL20DT-D/EL20DT1-D CP1L-EM40DR/EM40DT-D/EM40DT1-D/EM30DR-D/EM30DT-D/EM30DT1-D CP1L-L20DR-A/L20DR-D/L20DT-A/L20DT-D/L20DT1-D/L14DR-A/L14DR-D/L14DT-A/L14DT-D/L14DT1-D/L10DR-A/L10DR-D/L10DT-A/ L10DT-D/L10DT1-D CP1E-E14SDR-A/E20SDR-A/E30SDR-A/E40SDR-A/E60SDR-A CP1E-N30S1DR-A/N30S1DT-D/N30S1DT1-D/N40S1DR-A/N40S1DT-D/N40S1DT1-D/N60S1DR-A/N60S1DT-D/N60S1DT1-D CP1E-N30SDR-A/N30SDT-D/N30SDT1-D/N40SDR-A/N40SDT-D/N40SDT1-D/N60SDR-A/N60SDT-D/N60SDT1-D CP1E-E40DR-A/E30DR-A/E20DR-A/E14DR-A/E10DR-A/E10DT-A/E10DT1-A/E10DR-D/E10DT-D/E10DT1-D CP1E-N60DR-A/N60DT-A/N60DT1-A/N60DR-D/N60DT-D/N60DT1-D/N40DR-A/N40DR-D/N40DT-A/N40DT-D/N40DT1-A/N40DT1-D/ N30DR-A/N30DR-D/N30DT-A/N30DT-D/N30DT1-A/N30DT1-D/N20DR-A/N20DR-D/N20DT-A/N20DT-D/N20DT1-A/N20DT1-D/ N14DR-A/N14DT-A/N14DT1-A/N14DR-D/N14DT-D/N14DT1-D CP1E-NA20DR-A/NA20DT-D/NA20DT1-D CP2E-E14DR-A/E20DR-A/E30DR-A/E40DR-A/E60DR-A CP2E-S30DR-A/S40DR-A/S60DR-A/S30DT-D/S40DT-D/S60DT-D/S30DT1-D/S40DT1-D/S60DT1-D CP2E-N14DR-A/N20DR-A/N30DR-A/N40DR-A/N60DR-A/N14DR-D/N20DR-D/N30DR-D/N40DR-D/N60DR-D/N14DT-A/N20DT-A/ N30DT-A/N40DT-A/N60DT-A/N14DT-D/N20DT-D/N30DT-D/N40DT-D/N60DT-D/N14DT1-D/N20DT1-D/N30DT1-D/N40DT1-D/ N60DT1-D
NSJ	NSJ5-□-G5D NSJ8-□-G5D NSJ10-□-G5D NSJ12-□-G5D NSJ5-□-M3D NSJ8-□-M3D

**Note:** Including models no longer available to order.

## Related Manuals

Cat.No.	Model	Manuals name	Contents
W366	CXONE-AL□□D-V4	CX-Simulator Operation Manual	Describes the operating procedures for the CX-Simulator. Also refer to the following manuals when simulating operation: CX- Programmer Operation Manual (W446), CS Series Operation Manuals and CJ Series Operation Manual (CS Series: W339, CJ Series: W393), and CS/CJ Series Instructions Reference Manual (W340).
W469	CXONE-AL□□D-V4	CX-One Setup Manual	Installation and Overview of CX-One FA Integrated Tool Package

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