# **FA Integrated Tool Package CX-One**

# **CX-Simulator Ver.1**

CSM\_CX-Simulator\_Ver1\_DS\_E\_7\_3

# 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/NSJseries CPU Unit operation on the computer to debug PLC programs without a CPU Unit.

**Note:** The CX-Simulator is included in the CX-One FA Integrated Tool Package. It can not be purchased separately.





## **Features**

- 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**

	Specifications				
Product name		Number of Licenses	Media	Model	Standards
FA Integrated Tool Package CX-One Ver.4.□	The CX-One is a package that integrates the Support Software for OMRON PLCs and components.  CX-One runs on the following OS. Windows XP (Service Pack 3 or higher, 32-bit version) / Windows Vista (32-bit/64-bit version) / Windows 7 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version)  CX-One Ver.4. includes CX-Simulator. For details, refer to the CX-One catalog (Cat. No. R134).	1 license <b>*1</b>	DVD	CXONE-AL01D-V4	
FA Integrated Tool Package CX-One Lite Ver.4.□	CX-One Lite is a subset of the complete CX-One package that provides only the Support Software required for micro PLC applications.  CX-One Lite runs on the following OS. Windows XP (Service Pack 3 or higher, 32-bit version) / Windows Vista (32-bit/64-bit version) / Windows 7 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version)  CX-One Lite Ver.4. includes CX-Simulator.	1 license	DVD *2	CXONE-LT01D-V4	

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

\*1. Multi licenses (3, 10, 30, or 50 licenses) and DVD media without licenses are also available for the CX-One.

**\*2.** The CX-One Lite is also available on CD (CXONE-LT□□C-V4).

# **Product Configuration**

Setup disk : (CD) CD 4 pieces in the case \*

(DVD) DVD 1 piece in the case

Guidance : A4 size, English / Japanese

User license agreement / User registration card, English / Japanese

\* The CX-One Lite is available on CD (CXONE-LT□□C-V4).

# **Main Functions**

Category	Function		
	Execute continuously		
	Execute a single scan		
	Scan continuously		
	Execute a single step		
	Execute steps continuously		
	Pause the program execution		
Ladder program execution	Stop the program		
	Repeat scan from the beginning		
	Reset		
	Execute function block program		
	Execute ST program		
	Execute SFC program		
	Set/Reset break points		
	Stop the program at a break point		
	Set/Reset start point		
	Start program from a start point		
	Set/Reset I/O break conditions		
Program debugging	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)		
	Display CPU error status		
	Display FAL/MSG messages		
	Display alarms		
Monitor the status	Display cycle time details		
	Display each status of the task		
	Display the status of inter rock		
	Display the contents of output by the serial communications commands		
Set serial communications settings	Send/Receive the serial communications commands to/from the external devices		
	Connect PT with NT Link		
	Display the contents of output by the network communications commands		
Set network communications settings	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		
	Execute program in Debug UM		
	Start command log		
	Start CX-Programmer date trace file		
Execute virtual external input	Start CX-Programmer time chart monitor file		
	Set I/O conditions		
	Execute I/O conditions		
Integrated simulation	PLC-PT Integrated Simulation		
PLC Error simulator	PLC Error Simulator (CS/CJ/CP series)		
Data trace recording			
Other tools Multipoint data collect	tion		
tool	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.

# **Applicable Models**

Series	Unit
cs	CS1H-CPU63/64/65/66/67 CS1G-CPU42/43/44/45 CS1H-CPU63H/65H/65H/67H CS1G-CPU42H/43H/44H/45H CS1D-CPU65H/67H CS1D-CPU65H/67H CS1D-CPU65H/67H
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
СР	CP1H-XA40DR-A/XA40DT-D/XA40DT1-D/X40DR-A/X40DT1-D/X40DT1-D/Y20DT-D CP1L-M60DR-A/M60DR-D/M60DT-A/M60DT1-D/M60DT1-D/M40DR-A/M40DR-D/M40DT-A/M40DT-D/M40DT1-D/M30DR-A/M30DR-D/M30DT-D/M30DT1-D CP1L-EL20DR-D/EL20DT-D/EL20DT1-D CP1L-EM40DR/EM40DT1-D/EM40DT1-D/EM30DR-D/EM30DT-D/EM30DT1-D CP1L-EM40DR/EM40DT-D/EM40DT1-D/EM30DT-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/N60SDT-D/N60SDT1-D CP1E-E40DR-A/E30DR-A/E20DR-A/E14DR-A/E10DR-A/E10DT-A/E10DT1-A/E10DT-D/E10DT1-D CP1E-N60DR-A/N60DT-A/N60DT1-A/N60DR-D/N60DT1-D/N40DR-A/N40DR-D/N40DT-A/N40DT1-D/N30DT1-D/N40DT1-D/N30DT-D/N30DT1
NSJ	NSJ5-[]-G5D NSJ10-[]-G5D NSJ12-[]-G5D NSJ12-[]-G5D NSJ5-[]-M3D NSJ8-[-M3D

Note: Including models whose production were discontinued.

# **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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