Panasonic

IO-Link Configuration Tool SC-LG-CEF Configuration Tool User's Manual

OIO-Link

WUME-SCLGCT-4

(MEMO)

Thank you for using SC-LG-CEF Configuration Tool.

SC-LG-CEF Configuration Tool is an application that can collect measurement data from Panasonic IO-Link master **SC-LG2-CEF-P** and IO-Link devices connected to the IO-Link master, set up various parameters, and load data.

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Manual Configuration

1 Before Using This Product	This chapter explains the terminology and the functions of this software tool.
2 Preparation	This chapter explains the system environment, system overview, and connections.
3 Name and Function of Each Window	This chapter explains the name and function of each con- figuration window.
4 Other Functions	This chapter explains the master addition, removal, and as- signment functions, project creation and saving functions, network number setting function, and other functions.
5 Messages	This chapter explains confirmation dialog boxes.

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1 Before Using This Product

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1.1 Handling Precautions

The following symbols are used to indicate safety information that must be observed.

\bigotimes	Indicates an action that is prohibited.
•	Indicates an action that must be taken.
\triangle	Indicates a matter that requires caution.
Information	Indicates supplemental information.
Reference	Indicates reference to details about the subject in question.
Caution	Indicates points to be noted when the product is operated.

1.2 Terminology

	Term	Description						
	Master station	A station that controls the entire network. This station can perform cyclic transmission and transient transmission to all stations.						
	Slave station	A generic name of all stations other than master stations (local stations, remote I/O stations, remote device stations, and intelligent device stations)						
	SC-LG2-CEF-P	An IO-Link master compliant with CC-Link IE Field. This master connects IO-Link devices using e-CON connectors. PNP connection is based on the I/O interface specifications of IO-Link devices.						
	CC-Link IE Field net- work	A high-speed and large-capacity open field network using Ethernet (1000BASE-T)						
	Cyclic transmission	A function that periodically exchanges data between stations on the same network in the data link layer						
CC-Link IE	Transient transmission	A function that uses the read/write instructions of the program at the lo- cal station to read and write data from / to remote stations and commu- nicate with remote stations via peripheral devices in the data link layer						
	Memory map	A memory map where the functions of the communication unit are al- located to link devices. The master station can use the functions of the communication unit by accessing the link devices allocated on the memory map.						
	Link device	Internal devices held by the unit (RX, RY, RWr, and RWw)						
	Network number	A unique number that is assigned to identify each network when mul- tiple networks are created. Duplicate numbers cannot be set among all networks.						
	Station number	A unique number that is assigned to identify each network unit that is connected to a network. Duplicate numbers cannot be set among all network units within a network.						
	Intelligent device sta- tion	A station that cyclically transmits bit-based I/O signals and word-based I/O data to the master station. This station returns responses to transient transmission requests from other stations.						

	Term	Description					
	Process data (PD)	Cycle data. Process data is automatically transmitted during normal operation.					
	IEC 61131-9	One of the international certifications handling PLC standards that spec- ifies an I/O connection technology standardized for communication with sensors or actuators					
	IODD	Describes the device's own information and settings					
lated	IO-Link	A digital communications protocol that connects sensors or actuators to remote I/O, PLC, etc.					
	IO-Link device	Performs one-to-one and point-to-point IO-Link communications with the IO-Link master					
	IO-Link master	Plays a role as a gateway to transfer data between each IO-Link device and each of the systems connected to high-level buses					
	Port	An IO-Link communication channel port					

1.3 Overview

SC-LG-CEF Configuration Tool has the following functions.

- IO-Link master detection function This function detects IO-Link master SC-LG2-CEF-P on the CC-Link IE Field network via a programmable controller (PLC).
- IO-Link master port configuration function This function configure a port for IO-Link master **SC-LG2-CEF-P** that is detected.
- Function for communicating with IO-Link devices via IO-Link master The following processing can be performed on IO-Link devices connected to IO-Link master **SC-LG2-CEF-P** that is detected.
 - Reading process data from IO-Link devices and setting some data
 - Monitoring the IO-Link device detection status
 - Checking diagnosis information for IO-Link devices
- Other functions Project saving function, language switching function, and other functions

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2 Preparation

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2.1 System requirements

SC-LG-CEF Configuration Tool operates in the following system environment.

Compatible OS	Windows [®] 11 (64 bit) Windows [®] 10 (32 bit,64 bit)					
CPU	2 GHz or faster processor					
RAM	4 GB or more (Windows [®] 11 64 bit) 2 GB or more (Windows [®] 10 32 bit) 4 GB or more (Windows [®] 10 64 bit)					
Hard disk	Maximum 2 GB free space required					
Interface	1 Gbps					

• CD or DVD drive: Not required

- .NET Framework 4.6.2 onwards
- Download and install .NET Framework from Microsoft[®] download center if it is not already installed. • Microsoft Visual C++ 2019
- Redistributable Package (x86) must be installed separately.
- Adobe Reader

To display the Manual from the **Help** menu, Adobe Reader must be installed separately.

- Programmable controller (PLC) and CC-Link IE Field master unit
- GXWorks3

GXWorks3 must be installed separately because SC-LG-CEF Configuration Tool controls SC-LG2-CEF via sequencer manufactured by Mitsubishi Electric Corporation.



For information about compatible PLCs and CC-Link IE Field master units, refer to the website of CC-Link Partner Association (https://www.cc-link.org/en/).

The following models have been tested and confirmed to connect properly as of December 2021.

- QJ71GF11-T2
- LJ71GF11-T2
- RJ71EN71
- RJ71GF11-T2

2.2 System Overview

This system enables **SC-LG-CEF Configuration Tool** to transfer measured values and other data from IO-Link devices (such as sensors) via a programmable controller (PLC) and CC-Link IE Field network.

The main functions of the system are the IO-Link master setup function and the IO-Link device data monitoring / setting function.

2.2.1 System Connection Diagram

This system is explained as below.



The PC and PLC are connected with an Ethernet or USB cable.

The SC-LG2-CEF-P is used as IO-Link masters.

IO-Link devices including other manufacturers' products are used as IO-Link devices. The IODD file associated with each IO-Link device must be imported into **SC-LG-CEF Configuration Tool**.



- Download the IODD files from the website of the IO-Link device manufacturer or the IODDfinder website (https://ioddfinder.io-link.com/).
- The IODD files of Panasonic IO-Link devices can be downloaded from our website (https://industry.panasonic.com/global/en/downloads/?tab=software).

2.3 Setup on the Programmable Controller (GX Works3) Side

This section explains how to set up parameters for IO-Link master **SC-LG2-CEF-P**. The parameter setting method differs according to the master station unit. The parameter setting method is explained below, using Mitsubishi Electric Corporation's RJ71EN71 as an example.



For details, refer to the instruction manual of the master station unit that you use.

• Example of RJ71EN71(CCIEF) unit parameter settings

Station type: Master station Network No.: 1

<Network configuration settings>

Station number: 1 RX / RY settings (starting / ending): 1000 / 106F RWw / RWr settings (starting / ending): 1000 / 1083

<Refresh settings>

	Link side		\searrow	CPU	side
Device name	Starting address	Ending address		Device name	Starting address
SB	00000	001FF	⇔	SB	00000
SW	00000	001FF	⇔	SW	00000
RX	01000	0106F	⇔	Х	01000
RY	01000	0106F	⇔	Υ	01000
RWr	01000	01083	⇔	W	01400
RWw	01000	01083	⇔	W	00400

• Setting up RJ71EN71(CCIEF) unit parameters

Set up parameters in the engineering software (GX Works3) at the master station.

1. In the Navigation window, select Module Information and then RJ71EN71(CCIEF).



Reference

For details on how to set up the master station, refer to the instruction manual of the master station unit that you use.

2. Set up the contents of **Required Settings** for module parameters as shown below.

段 0000:RJ71EN71(CCIEF) Mod ×		4 ▷ 🗸
Setting Item List	Setting Item	
Input the Setting Item to Search	Item	Setting
	Station Type Station Type	Master Station
	Network No. Network No.	1
Image: The section of the sectio	Station No. Setting Method	Parameter Editor
H-m Application Settings	Station No.	0
	Setting Method of Basic/Application Settings	Parameter Editor

3. Double-click <Detailed Setting> in Network Configuration Settings.



4. The CC IE Field Configuration dialog box will be displayed.

In the **Module List**, select **SC-LG2-CEF-P** under **CC IE Field Module (Panasonic Industry)** and drag and drop it into the station list or network configuration diagram. **SC-LG2-CEF-P** will be added.

	🖪 cc	IE Field Co	nfiguration (Start I/O: 00	00)						_	-	_			×
	i cc	IE Field Co	figuration	Edit <u>V</u> iew	Tool C	lose with Discardi <u>ng</u> the	Setting C	lose with <u>R</u> efl	ecting the	e Setting						
		[Detect Now										Module	List		×
		Mode Setting	Online (Stan	dard Mode)		- Assignment Method:	itart/End	👻 🛛 Link Sc	an Time (Ap	prox.):	0.68	ms	CC IE FI	eld Selection Find Mo	dule My Favorite	s
		No.	Mod	lel Name	STA#	Station Type	RX	RY Setting	RW	w/RWr Set	ting	Reserved/Error em Switching Monit	<u>₽1</u> 9↓	12日本 🖻 🗙		
Station list		85 0	Host Station		0	Master Station	Points	Start Linu	Points	Start	LING		⊞ Bas	sic Digital I/O Combin	ed Module	-
		1 1	SC-LG2-CEF-F		1	Intelligent Device Station	112	0000 006	F 4	0000	0003	No Setting	⊞ Ba	sic Analog Input Mod	ule	
	-	LE .											⊞ Bas	sic Analog Output Mo	dule	
													🖽 Bas	sic Multiple Input (Vo	ltage/Current/1	ê
													🕀 Ba	sic Temperature Cont	rol Module	
													⊞ Bas	sic High-Speed Count	er Module	
													⊞ Ext	ension Digital Input I	Aodule	
													E Ext	ension Digital Output	Module	
													E EXT	ension A/D Conversi	on Module	
													E EXT	ension D/A Conversi	on Module	
			-									,	H 60	12000 Series		
			STA#1											trouu series	r risk osself	Ε
Network														dge module(CC-Link I	E Field Notwork	
NCLWOIK	自局												a bri	dge module(CC-Link I	E Field Anything	
configuration ——	0.00		. 1											E Sorios (Intolligant D	e rieu-Anywire	
														Fold Modulo (Panace	nic Inductor)	
diagram	ST/	A#0 Master												Link Master for CC-Li	nk TE Field	
0	Line	/Star	-					Г)rad	and	d di	ron		SC-LC2-CEE-P	Control IO-I	
			SC-LG2-CE					_	nag	an		νop			Control 10	1
			F-P										[Outline]		~
													IO-Link N	laster for CC-Link IE Fie	ld	
					-					-	-		Tobecin	Lacionj		-
	Out	put														×

If CSP+ for SC-LG2-CEF-P has not been registered, **"SC-LG2-CEF-P"** will not be displayed in the **Module List**. Register CSP+ in advance.

If CSP+ for SC-LG2-CEF-P cannot be registered, use and set CSP+ for general intelligent device stations.



Ω

For information about how to download CSP+, refer to the **SC-LG2-CEF-P** User's Manual (our website: https://industry.panasonic.com/).

5. Set up a CC IE Field configuration as shown below.

12	C IE F	ield Co	nfiguration (Start I/O: 0000)	_	_	_	_	_		-	
÷c	CC IE Field Configuration Edit View Tool Close with Discarding the Setting Close with Reflecting the Setting											
	Detect Now											
	<u>M</u> ode	Setting:	Online (Standard Mode)		 <u>A</u>ssignment Method: <u>Sta</u> 	art/End	•	Link Scan	Time (Ap	prox.):	0.73	ms
		No	Madel Name	CTA#	Station Turns	R)	(/RY Settin	g	RWv	v/RWr Se	tting	Reserved/Error Invalid
		NO.	Model Name	STA#	Station Type	Points	Start	End	Points	Start	End	n Switching Monitoring I
		0	Host Station	0	Master Station							
		1	SC-LG2-CEF-P	1	Intelligent Device Station	112	1000	106F	132	1000	083	No Setting

6. After setting up the configuration, click the Close with Reflecting the Setting menu to close the CC IE Field Configuration dialog box.



7. Double-click <Detailed Setting> in Refresh Settings.

😫 0000:RJ71EN71(CCIEF) Mod ×		
Setting Item List	Setting Item	
Transfeller Catting Barry to Canada	Item	Setting
Input the Setting Item to Search	Network Configuration Settings	
	Network Configuration Settings	<detailed setting=""></detailed>
	😑 Refresh Settings	
E Bequired Settings	Refresh Settings	<detailed setting=""></detailed>
Basic Settings	Network Topology	
Network Configuration Settings	Network Topology	Line/Star
Refresh Setting	Operation of Master Station after Reconnection	
Network Topology	Operation of Master Station after Reconnection	Return as Master Operation Station
Geration of Master Station after ⊡-∰ Application Settings		

8. A refresh parameter setting window will be displayed. Specify settings as below.

Link Side				CPU Side										
ll r	NU.	Device Nam	ne	Points	Start	End	1	Target		Device Nam	ne	Points	Start	End
	-	SB	-	512	00000	001FF	+	Specify Devic	Ŧ	SB	•	512	00000	001FF
	-	SW	-	512	00000	001FF	+	Specify Devic	Ŧ	S₩	•	512	00000	001FF
	1	RX	-	112	01000	0106F	+	Specify Devic	Ŧ	Х	•	112	01000	0106F
	2	RY	•	112	01000	0106F	+	Specify Devic	Ŧ	Y	•	112	01000	0106F
	3	RWr	-	132	01000	01083	-	Specify Devic	Ŧ	W	•	132	01400	01483
	4	R₩w	•	132	01000	01083	+	Specify Devic	Ŧ	W	•	132	00400	00483
	5		•				+		Ŧ					
	0						4.4		-					

3 Name and Function of Each Window

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3.1 Operating Procedure

The procedure for operating SC-LG-CEF Configuration Tool is shown below.



Notes: 1) If the Auto Login check box in the Option window is selected, the Login window will not be displayed.
2) When starting SC-LG-CEF Configuration Tool for the first time, set a network number to add an IO-Link master for which no network number has been set.

3.2 Login Window

In the Login window, log in to the tool by entering the password corresponding to the user authority of **SC-LG-CEF Configuration Tool**.

When **SC-LG-CEF Configuration Tool** starts, the Login window is displayed only if the Auto Login check box in the Option window is not selected.



\searrow	Name	Description
1	User Administration	Select an appropriate user authority from Operator, Maintenance, and Spe- cialist. After login is completed, information in the IODD file corresponding to the selected user authority will be displayed.
2	Password	You can enter the password corresponding to each user authority. A password that you enter is displayed as black dots (•). The default password is unset. You can change a password in the Option window.
3	Login	Clicking this button displays the main window if the user authority and the password match. If they do not match, you cannot proceed to the next window even if you click the Login button.
4	Exit	Clicking this button closes SC-LG-CEF Configuration Tool.



For details on how to set a password, refer to "3.10 Option Window".

3.3 Start Window

This window is used to select appropriate start options and start **SC-LG-CEF Configuration Tool**.

Load from Master	
Connecting IO-Link Master Select All	
	Start

	Name	Description
1	New	Select this option to set up a new IO-Link master or IO-Link device offline.
2	Open	Select this option to open the file of a project that has been set up before.
3	Load from Master	Select this option to load data from an IO-Link master that is connected to the PC via a PLC. When this option is selected, the "Connecting IO-Link Master" area can be manipulated.
4	Connecting IO-Link Master	A list of IO-Link masters that are connected to the PC via a PLC is dis- played. You can select a desired IO-Link master by selecting the check box on the top left of the frame of the device. The product name and connecting information [NNo. (network No.), SNo. (station number)] are displayed. Select the check box on the top left of the frame of the master that you want to set up. By clicking the Select All check box, you can select or cancel all the IO-Link masters that are displayed.
5	Start	 After selecting New, Open, or Load from Master, click this button to start SC-LG-CEF Configuration Tool. If you select New and then click the Start button, you will be prompted to select the IO-Link master to be added. If you select Open and then click the Start button, the previously set conditions will be displayed. If you select Load from Master and then click the Start button, the data of the selected IO-Link master(s) will be loaded. If none of the connected IO-Link masters is selected, the Start button will be grayed out.

Reference

For information about how to add IO-Link masters offline, refer to "4.1 Master Addition Function".

3.4 Master Port Configuration Window

3.4.1 Master Port Configuration

This window is used to display and set up each port of the IO-Link master selected in the tree on the left side of the window.

If you select an IO-Link master in the tree, a master port subwindow will be displayed in the Port Setting tab.

(E) E	lit(<u>E</u>) Help(<u>H</u>)		F	ort Setting			-	_			- Informa	ipecia
1	SC-LG2-CEF-P	-CC-Link IE Field		ort Setting				Dete	ct Devices		Write	Read
1	DP-101ZL3-M-P	Panasonic Industry C	No.	Mode		Device		Vendor	Validation & Backup		PD Size IN	PD S
2	NC NotConnected		1	IO-Link	~	DP-101ZL3-M-P	0	Panasonic Industry Co., Ltd.	No Check	~	32	
			2	Inactive			Q A		No Check	~	32	-
	NC NotConnected		4	Inactive	v		×		No Check	~	32	-
4	NC NotConnected		5	Inactive	~		ŏ		No Check	~	32	-
	NC NotConnected		6	Inactive	~		Ó		No Check	~	32	-
-	N.C. NatConnected		7	Inactive	~		¢		No Check	~	32	
	NC		8	Inactive	~		¢		No Check	~	32	
8	NC NotConnected											
D Ad	d 💼 Delete		_									

Rie(E) Edit(E) Help(H)		SC-LG-CEF Configuration Tool				_ □ × Specialist
SC-LG2-CEF-P	Port Setting					Information
CC-Link IE Field				Detect Devices	I ← Write	I → Read
1 DP-101ZL3-M-P Panasonic Industry C	ode	Device	Vendor	Validation & Backup	PD Size IN	PD Size OUT
)-Link ∨	DP-101ZL3-M-P	Panasonic Industry Co., Ltd.	No Check	32	32
2 NC NotConnected	active 🗸 🗸	0]	No Check	32	32
3 NC NotConnected	active 🗸 🗸	0		No Check	32	32
	active 🗸	0]	No Check	32	32
4 NotConnected	active 🗸	0		No Check	32	32
5 NC NotConnected	active 🗸	0]	No Check	32	32
6 NC NotConnected	active 🗸	0		No Check	32	32
	active 🗸	0]	No Check	32	32
7 NC NotConnected					-	
8 NC NotConnected	1					
_						
Add 💼 Delete						
0 0					_	-
ŏУ				6		(
				V		I

3.4 Master Port Configuration Window

\searrow	Name	Description
1	Detect Devices	Clicking this button changes the settings of all the ports to IO-Link mode and detects the IO-Link devices connected to the selected IO-Link master. If the selected IO-Link master is unconnected the Detect Devices button will be grayed out.
2	Write	Clicking this button writes the current port configuration to the selected IO- Link master. If the selected IO-Link master is unconnected, the Write button will be grayed out.
3	Read	Clicking this button reads the port configuration from the selected IO-Link master. If the selected IO-Link master is unconnected, the Read button will be grayed out.
4	Mode	You can change the port mode for each port of the selected IO-Link master. Inactive DI DO IO-Link INACTIVE IN
5	Device / Vendor	The Device and Vendor columns display product names and vendor names, respectively, for IO-Link devices that are connected. To change the IO-Link device, click the 🚺 button.

\searrow	Name	Description
		If you select IO-Link in the Mode column, you can select the validation level and data storage mode as below.
		No Check
		Compatible V1.0 device, No Data Storage
		Compatible V1.1 device, Backup & Restore
		Compatible V1.1 device, No Data Storage
		Compatible V1.1 device, Restore
6	Validation & Backup	 No Check: No IO-Link device validation or data storage is performed. Compatible V1.0 device, No Data Storage: Vendor ID and device ID are validated for V1.0 IO-Link devices. No data storage is performed. Compatible V1.1 device, No Data Storage: Vendor ID and device ID are validated for V1.1 IO-Link devices. No data storage is performed. Compatible V1.1 device, Backup & Restore: Vendor ID and device ID are validated for V1.1 IO-Link devices. For data storage, both backup and restoration are performed. Compatible V1.1 device, Restore: Vendor ID and device ID are validated for V1.1 IO-Link devices. For data storage, both backup and restoration are performed. Compatible V1.1 device, Restore: Vendor ID and device ID are validated for V1.1 IO-Link devices. For data storage, only restoration is performed.
7	PD Size IN / PD Size OUT (Process data size IN / OUT)	 If you select IO-Link in the Mode column, you can select process data size (IN / OUT). (Input range: 1 to 32) If the values of PD Size IN and PD Size OUT are different, the size will be set to the larger value. (For example, if the value of PD Size IN is 4 and the value of PD Size OUT is 1, both values will be set to 4.
8	Add	Clicking this button adds a new IO-Link master to the tree.
9	Delete	Clicking this button deletes the selected IO-Link master from the tree.

Information

By right-clicking with a port selected, you can copy and paste all the settings of the port.

Reference

For details on how to change devices, refer to **"3.4.2 Select Device Window"**. For details on how to add IO-Link masters, refer to **"4.1 Master Addition Function"**. For details on how to delete IO-Link masters, refer to **"4.2 Master Removal Function"**.

3.4.2 Select Device Window

This window allows you to select the IO-Link device to be connected to the IO-Link master. Clicking the 💽 button in the master port configuration window displays the Select Device window.

		Select Device						×	
		Vendor							
1		■	É	₽ ★	\bigcirc	Panasonic	▶		
			A	All Favorite	Latest	Panasonic			
2	_	IO-Link Revision				Switch	display Details 🗸	⊢ 5	
2		Search	HG-C10 Papasor	30L3-P aic Industry Co., Ltd.	1	HG-C1050L3-P-J Panasonic Industry Co. 1td	ry Co., Ltd. HG-C1; Panaso		
5		Device Family	V1.1	와 (Industry Co., Etd.)	N.C.	V1.1 ☆	V1.1		
		All	HG-C10	30L3-P-J		HG-C1100L3-P	HG-C1;		
		Distance Sensor	Panasor V1.1	nic Industry Co., Ltd. ናረ		Panasonic Industry Co., Ltd.	Panaso V1.1	-6	
		Fiber sensors	~		-		-		
4		Pressure sensors	HG-C10 Panasor V1.1	50L3-P nic Industry Co., Ltd.		HG-C1100L3-P-J Panasonic Industry Co., Ltd. V1.1	HG-C1 ⁴ Panaso V1.1		
				W	NY.				
					_				
		Delete					Assign Cancel		
		÷							
							A M		
							0 3		
		Name				Description	0 3		
		Name	IO vic	-Link devices i	n the dev or that yo	Description ice list can be narrow u select.	ved down to the l	O-Link de-	
	1	Vendor	IO vic	-Link devices i es of the vend All: Displays th Favorite: Displ	n the dev or that yo ie IO-Link ays only t	Description rice list can be narrow u select. devices of all vendo the IO-Link devices s	ved down to the lines	O-Link de- es	
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\searrow	Name	Description				
	Name	Description The device list display method can be changed. Switch display Details Image: Details is all Devices in Details Image: Details is the devices in detail Image: Details is Displays IO-Link devices in detail Image: Details is the devices in detail Image: Details is Displays IO-Link devices in detail Image: Device is the device				
5	Display method switching function	Panasonic Industry Co., Ltd. Panasonic Industry Co., Ltd. V1.1 V1.1 Panasonic Industry Co., Ltd. V1.1 Panasonic Industry Co., Ltd. Panasonic Industry Co., Ltd. V1.1 V1.1 Panasonic Industry Co., Ltd. V1.1 V1.1 V1.1 Panasonic Industry Co., Ltd. V1.1 V1.1 V1.1 V1.1 <t< td=""></t<>				
		Image: HG-C1100L3-P Panasoni···· Image: FX-551L3-P-J Panasonic···· Image: HG-C1100L3-P-J Panason···· Image: PX-551L3-P-J Panasoni···· Image: HG-C1100L3-P-J Panason···· Image: PX-551L3-P-J Panason···· Image: HG-C1100L3-P Panason···· Image: PX-551L3-P-J Panason····				
6	Device list	This area displays IO-Link devices that match the search criteria specified in Vendor, IO-Link Revision, Search, or Device Family.				
7	Delete	Clicking this button deletes the IODD file included in the IO-Link device se- lected in the device list. A confirmation dialog box is displayed before the IODD file is deleted. If "Yes" is selected, the IODD file will be deleted.				
8	Assign	Clicking this button determines the IO-Link device selected in the device list and returns the display to the master port configuration window.				
9	Cancel	Clicking this button returns the display to the master port configuration win- dow without determining the IO-Link device.				

3.5 Master Information Window

This window displays device information for the IO-Link master selected in the tree on the left side of the window.

If you select an IO-Link master in the tree, a master information subwindow will be displayed in the **Information** tab.

<mark>].</mark> - File(E) Edit(E) Help(<u>H</u>)	SC-LG-CEF Configuration Tool	_ □ × Specialist
CC-Link IE Field	Port Setting	Information
1 DP-101ZL3-M-P Panasonic Industry C	Vendor Information	
2 NotConnected	Panasonic industry Lo., Ltd. Panasonic wendor URL https://industry.panasonic.com/	
3 NC NotConnected		
4 NotConnected	Details	
5 NC NotConnected	Label Product Name SC-LG2-CEF-P	
6 NC NotConnected	Number of ports 8	
7 NC NotConnected		
8 NC NotConnected		
	Network No. Setting	

\searrow	Name	Description
1	Label	You can assign a name to the device selected in the tree. The assigned name will be reflected in the tree.
2	Network No. Setting	Clicking this button displays the window for changing the network number of the IO-Link master.



For details on how to change network numbers, refer to "4.8 Network Number Setting Function".

3.6 Device Monitoring Window

This window is used to monitor process data for the IO-Link device selected in the tree on the left side of the window.

If you select an IO-Link device in the tree, a device monitoring subwindow will be displayed in the **Monitor** tab.



\smallsetminus	Name	Description				
1	Update cycle	You can set an update cycle at which a graph is drawn. (Unit: ms) 100 200 500 1000				
2	Operation	You can replay, pause, or stop graph drawing.				
3	Analog - Item	You can select analog items for which graphs are to be drawn. Items that you can select are analog items of process data for IO-Link devices.				
4	Analog - Upper / Lower	You can set the upper and lower limit values for analog items for which graphs are to be drawn.				
5	Analog - Custom	You can set up a bar of custom values on the graph.				
6	Digital - Item	You can select digital items for which graphs are to be drawn. Items that you can select are digital items of process data for IO-Link devices.				
7	Graph drawing area	Sraphs are displayed by reflecting the settings in "Update cycle", "Operation", Analog - Item", "Analog - Upper / Lower", "Analog - Custom", or "Digital - tem".				

3.7 Device Setup Window

This window is used to set up parameters for the IO-Link device selected in the tree on the left side of the window.

If you select an IO-Link device in the tree, a device setup subwindow will be displayed in the **Set** tab.

	1	345
	ī	ĬĬĬ
E, = File(E) Edit(E) Help(<u>H</u>)	SC-LG: CEF Configuration Tool	_ C × Specialist
SC-LG2-CEF-P	Monitor Set	Diagnosis Information
1 DP-101ZL3-M-P Panasonic Industry C	Control Output(DO) ON	Identification Observation Parameter Diagnosis
2 NC NotConnected	Information Notification No notification	Vendor Name Panasonic Industry Co., Ltd.
3 NC NotConnected	Error level Normal	Vendor Text https://industrypanasonic.com/
4 NC NotConnected	Scale -1.0	Product Name
5 NC NotConnected	Pressure 0.4	Hardware Version
6 NC NotConnected	(Firmware Version
7 NC NotConnected		Serial Number
8 NC NotConnected		
Add 💼 Delete		

\searrow	Name	Description
1	Process data display area	Process data items are displayed according to the information in the IODD file of the IO-Link device selected in the tree. The values obtained from the selected device are displayed as the values of the process data items.
2	Parameter display area	Parameters are displayed according to the information in the IODD file of the IO-Link device selected in the tree. buttons are arranged for each item, so that individual items can be loaded. If the user changes the value of an item, a red asterisk (*) will be displayed at the beginning of the item.
3	Write	Clicking this button writes the parameter value(s) changed in the parameter display area to the IO-Link device.
4	Read	Clicking this button reads all the parameter values in the parameter display area from the IO-Link device.
5	Write Auto	If this check box is selected, when the value of any parameter displayed in the parameter display area is changed, the value will be immediately re- flected in the IO-Link device. If this check box is not selected, when the value of any parameter dis- played in the parameter display area is changed, the value will not be re- flected in the IO-Link device until the Write button is clicked.

3.8 Device Diagnosis Window

This window displays diagnosis information for the IO-Link device selected in the tree on the left side of the window.

If you select an IO-Link device in the tree, a device diagnosis subwindow will be displayed in the Diagnosis tab.



\searrow	Name	Description
1	Status	The status of the current IO-Link device is displayed. The status is Normal, Notification, Caution or Abnormal.
2	Status details	 Details are displayed when the status is Notification, Caution, or Abnormal. Notification: Measurement error, reduced amount of entering light, unstable entering light, or applied voltage during zero-point adjustment Caution: Operating time limit exceeded or nonvolatile memory saving count limit exceeded Abnormal: DC output short-circuit, nonvolatile memory error, or damaged LED circuit
3	Operating Time	The amount of IO-Link device operating time is displayed.
4	Stored Count	The number of write operations to the IO-Link device is displayed.

Information

The Diagnosis tab is displayed only when a Panasonic IO-Link device is selected.

3.9 Device Information Window

This window displays device information for the IO-Link device selected in the tree on the left side of the window.

If you select an IO-Link device in the tree, a device information subwindow will be displayed in the Information tab.

E. File	, (E) E	idit(<u>E</u>) H	Help(<u>H</u>)		:	SC-LG-CEF Confi	iguration Too	bl				– 🗆 🗙 Specialist
~		SC-L	.G2-CEF-P	-CC-Link IE Field	Monitor	Se	et	Diag	gnosis			Information
	1		DP-101ZL3-M-P	Panasonic Industry C	Vendor	Information	Vanda	r Nama	Papacopic	ndurta Co. Ltd.		
		NC	NotConnected		Pa	anasonio	Venco	dor Text	https://indi	istry.panasonic.com/		
		NC	NotConnected				Veno	dor URL	https://indi	ustry.panasonic.com/		
	4	NC	NotConnected		Details							- 4
	5	NC	NotConnected		1		Product	Label Name D	P-101			
l	6	NC	NotConnected		1	500 S	Descr	ription Pr	ressure ser	nsor for low pressure DP-101ZL3-M-P		
l		NC	NotConnected									
	8	NC	NotConnected		De	evice ID 0x6000 Bitrate COM3	10			IO-Link Revision V1.1 MinCycleTime 1000µs		
					IODD I	nformation						_ 1
					File	e Name Panaso	nic-DP101-2	0180419-	-IODD1.1.×	ml		
	O A	dd	💼 Delete			Version V0.1				Date 4/19/2018		
			N	ame						Description		
					Y	ou can a	ssian a	a nar	ne to	the device selected	in the tr	ee.

The assigned name will be reflected in the tree.

1 Label

3.10 Option Window

This window allows you to set options for **SC-LG-CEF Configuration Tool**. Selecting Option from the File menu displays the Option window as a pop-up window.

Option			×	
Login Setting —				
Auto Login				
User Administration	Specialist	\sim	 +'	1
Password				
Password of User Admi	inistration —			
Operator		Change		
Maintenance		Change	+2	2
Specialist		Change		
	OK	Cancel		
	3	4		

\searrow	Name	Description
1	Login Setting	 You can set up auto login and specify a user authority and password that are required for auto login. You can specify a user authority and password only when you select the Auto Login check box. If you select the Auto Login check box, you must specify a user authority and password. In this case, the Login window will be omitted when the tool starts.
2	Password of User Administra- tion	You can specify a password for each user authority.
3	OK	Clicking this button saves the setting changes and closes the window.
4	Cancel	Clicking this button closes the window without saving the setting changes.

3.11 Version Information Window

This window displays version information for **SC-LG-CEF Configuration Tool**. Selecting **Version** from the Help menu displays a pop-up window that shows the version information.



4 Other Functions

4.1 Master Addition Function	4-2
4.2 Master Removal Function ·····	4-3
4.3 Master Assignment Function ·····	····· 4 - 3
4.4 Device Settings Copy / Paste Function	····· 4 - 4
4.5 Project Creation Function ·····	4-4
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4.7 IODD Management Function ·····	4-5
4.8 Network Number Setting Function	······ 4 - 6
4.9 Language Switching Function	4-7
4.10 Exit Function ·····	4-7

4.1 Master Addition Function

This function adds a new IO-Link master to the tree. Clicking the Add button under the tree displays the Adding a Master window.



$\overline{\ }$	Name	Description
1	Create a new Master	A list of IO-Link masters is displayed. By selecting an IO-Link master in the Create a new Master tab and then clicking the Add button, you can add the IO-Link master in an offline state to the tree.
2	Connecting IO-Link Master	A list of IO-Link masters connected to the PC is displayed. You can select a desired IO-Link master by selecting the check box on the top left of the frame of the device. By selecting the Select All check box, you can select all the IO-Link masters.
3	Add	Clicking this button adds an IO-Link master to the tree.
4	Cancel	Clicking this button closes the Adding a Master window.

4.2 Master Removal Function

This function removes the selected IO-Link master from the tree. Clicking the Delete button under the tree displays a confirmation dialog box and clicking the OK button removes the selected IO-Link master from the tree.



If an IO-Link device is selected in the tree, the Delete button will be grayed out.

4.3 Master Assignment Function

This function assigns the selected IO-Link master (in an offline state) to the actual IO-Link master.

Clicking the connection icon of an IO-Link master in an offline state in the tree displays a dialog box.



The dialog box displays IO-Link masters that are connected. Select an IO-Link master that you want to assign.

By clicking the Assign button with the IO-Link master selected, you can reflect the settings of the IO-Link master (that you set up offline) into the actual IO-Link master.



Information

The settings of IO-Link devices that you set up offline cannot be reflected by assignment processing.

4.4 Device Settings Copy / Paste Function

This function enables you to copy and paste the settings of the IO-Link device that you select. By selecting and right-clicking an IO-Link device in the tree, you can copy and paste the settings of the IO-Link device.



Executing the Copy function causes the frame of the target IO-Link device to blink.



After copying, if you select the same device and execute the Paste function, the settings of the selected IO-Link device will be replaced with the settings of the copy source. You cannot paste the settings to any IO-Link device that differs from the copy source.

The copy / paste function can be executed by selecting Copy and Paste from the Edit menu or using the shortcut keys.



4.5 Project Creation Function

This function creates new projects.

Selecting New from the File menu displays a confirmation dialog box asking whether to save the project that you are currently working on. Then, you can create the project as a new project.

4.6 Project Saving Function

This function saves the project that you have worked on.

You can save the current project by selecting Save or Save As from the File menu. (The extension of saved files is ".iol".)

By selecting Open from the File menu, you can open any project that has been saved.

4.7 IODD Management Function

This function enables you to import or delete IODD files.

Selecting **Import IODD** from the File menu displays a file selection window. Selecting a valid IODD file imports the file into **SC-LG-CEF Configuration Tool**.

The IO-Link device specified in the imported IODD file will be added to the Select Device window.

Selecting Delete IODD from the File menu displays the Select Device window.

Selecting an IO-Link device and then clicking the **Delete** button deletes the IODD file that contains the selected IO-Link device.





- IODD files that have been imported can be used until they are deleted.
- Download the IODD files from the website of the IO-Link device manufacturer or the IODDfinder website (https://ioddfinder.io-link.com/).
- The IODD files of Panasonic IO-Link devices can be downloaded from our website (https://industry.panasonic.com/global/en/downloads/?tab=software).

4.8 Network Number Setting Function

This function sets a network number for each IO-Link master.

The Network number window is displayed when you add an IO-Link master without a network number or click the **Network No. Setting** button in the Information tab of the IO-Link master information window.

Network number			
Ne	etwork number	1	
	Set	Cancel	

Information

In the Network number field, enter the network number that is set for the IO-Link master.



Unless the correct network number is set, the IO-Link master and IO-Link devices cannot be set up normally.

4.9 Language Switching Function

This function allows you to switch the language for **SC-LG-CEF Configuration Tool**. Selecting Language from the File menu enables you to switch the language between Japanese and English.

<mark>File(F)</mark> Edit(E) Help(H)	
 New Open Save Save As Import IODD Delete IODD Option 	CC-Link IE Field Panasonic Industry C
Language 🔸	Japanese
🗴 Exit	English



When you have switched the language, restart SC-LG-CEF Configuration Tool.

4.10 Exit Function

This function closes **SC-LG-CEF Configuration Tool**. Selecting Exit from the File menu enables you to close **SC-LG-CEF Configuration Tool**. (MEMO)

5 Messages

5.1 Messages······	
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Various confirmation dialog boxes are displayed when the user is asked for confirmation during operation or the device enters in an inoperable state. If any message is displayed, carefully read the following information and check an appropriate action method.

5.1 Messages

Message	Action method
Invalid IODD file!	The IODD file that you attempted to import is invalid and so you can- not import it. Contact the organization from which you obtained the IODD file.
The file can't be deleted because XXX is using	The IODD file that you want to delete is currently in use, so it cannot be deleted. Close the project first and then delete the file.
It failed to write the device's parameter.	An attempt to write the parameter to the IO-Link device has failed. Check the connections. If any error message is displayed, take action according to the mes- sage.
Loading the setting file is failed	The file required to start SC-LG-CEF Configuration Tool was not found. The tool will be started using the default settings.
The password you entered is incorrect	Enter the same password in both password fields.
The real device and configured device are different	The IO-Link device set up with SC-LG-CEF Configuration Tool differs from the IO-Link device that is actually connected. Check the tool settings or actual connections.
The data format is wrong.	The format of the entered data is incorrect. Enter data in the correct format.
The real device and configured device are different	The IO-Link device set up with SC-LG-CEF Configuration Tool differs from the IO-Link device that is actually connected. Check the tool settings or actual connections.
It's a same port number.	For the paste target port, specify any port other than the copy source port.
It failed to read the port configuration.	An attempt to read port settings from the IO-Link master has failed. Check the connections.
The password you entered is incorrect.	Enter the correct password.
It failed to write the port configuration.	An attempt to write port settings to the IO-Link master has failed. Check the connections.

Revision history	Revision date	Revision item
First edition	February 2019	—
2nd edition	December 2021	 Revision due to software version upgrade (Ver. 1.3) Revision due to addition of compatible CC-Link IE Field master unit
3rd edition	January 2023	 Revised "1.4 Software License Agreement " Revised "2.1 System Environment " Added notes Corrected errors
4th edition	April 2024	Change in Corporate name

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