CC-Link MASTER MODULE (YOKOGAWA ELECTRIC PLC USE) PC CONFIGURATOR SOFTWARE

Model: FAMCLCFG

USERS MANUAL

Contents

1. INTRODUCTION	4
1.1 GENERAL DESCRIPTION	4
1.2 CORRESPONDING VERSION	4
1.3 PC REQUIREMENTS	4
1.4 NUMBER OF CONNECTABLE MODULES	4
1.5 DRIVER SOFTWARE	4
1.6 INSTALLING & DELETING THE PROGRAM	4
1.6.1 TO INSTALL THE PROGRAM	4
1.6.2 TO DELETE THE PROGRAM	4
2. GETTING STARTED	5
2.1 FILE (F) MENU	5
2.1.1 FILE (F) > OPEN (O)	5
2.1.2 FILE (F) > SAVE (S)	5
2.1.3 FILE (F) > SAVE AS (A)	5
2.1.4 FILE (F) > OPEN CSV FILE (C)	5
2.1.5 FILE (F) > SAVE CSV FILE (V)	5
2.2 EDIT (E) MENU	6
2.2.1 EDIT (E) > MASTER STATION (M) > SETTING (S)	6
2.2.2 EDIT (E) > SLAVE STATION (S) > ADD BY CSP (C)	6
2.2.3 EDIT (E) > SLAVE STATION (S) > ADD BY CSP+ (P)	8
2.2.4 EDIT (E) > SLAVE STATION (S) > ADD GENERIC DEVICE (N)	9
2.2.5 EDIT (E) > SLAVE STATION (S) > DELETE (D)	9
2.3 ONLINE (T) MENU	10
2.3.1 ONLINE (T) > COM SETTING (S)	10
2.3.2 ONLINE (T) > CONNECT (C)	13
2.3.3 ONLINE (T) > DISCONNECT (D)	13
2.3.4 ONLINE (T) > MONITOR SLAVE STATION (M)	14
2.4 LANGUAGE (L) MENU	16
2.5 BASIC VIEW (MASTER STATION)	17
2.5.1 UNIT NO., SLOT NO	17
2.5.2 NUMBER OF CONNECTED STATIONS	17
2.5.3 RETRY COUNT	18
2.5.4 AUTOMATIC RECONNECTION STATION COUNT	
	18 ۱۵
2.5.9 UPLOAD DOWNLOAD	

	2.6 BASIC VIEW (SLAVE STATION)	20
	2.6.1 STATION NO	20
	2.6.2 DEVICE MODEL NUMBER	20
	2.6.3 DEVICE TYPE	20
	2.6.4 STATION TYPE	20
	2.6.5 DEVICE COMMENT	20
	2.6.6 VENDOR	21
	2.6.7 RESERVED/ERROR INVALID STATION	21
	2.6.8 CC-LINK VERSION	21
	2.6.9 NUMBER OF OCCUPIED STATIONS	21
	2.6.10 EXPANDED CYCLIC SETTING	21
	2.6.11 REMOTE STATION POINTS RX/RY	21
	2.6.12 REMOTE STATION POINTS RWw/RWr	21
_		
3.	FAMCLCFG FILES	22
	3.1 FAMCLCFG FOLDERS	22
	3.1 FAMCLCFG FOLDERS 3.2 CSP FILES	22
	3.1 FAMCLCFG FOLDERS3.2 CSP FILES3.3 CSP+ FILES	22 22 22
	 3.1 FAMCLCFG FOLDERS 3.2 CSP FILES 3.3 CSP+ FILES 3.4 CONFIGURATION FILES 	22 22 22 22
	 3.1 FAMCLCFG FOLDERS 3.2 CSP FILES 3.3 CSP+ FILES 3.4 CONFIGURATION FILES 	22
4.	 3.1 FAMCLCFG FOLDERS	22 22 22 22 23
4.	 3.1 FAMCLCFG FOLDERS	22 22 22 22
4.	 3.1 FAMCLCFG FOLDERS	
4.	 3.1 FAMCLCFG FOLDERS	
4 . 5 .	 3.1 FAMCLCFG FOLDERS	22 22 22 23 23 23 24
4. 5.	 3.1 FAMCLCFG FOLDERS	22 22 22 23 23 23 24
4. 5.	 3.1 FAMCLCFG FOLDERS	22 22 22 23 23 23 24 24 25

1. INTRODUCTION

1.1 GENERAL DESCRIPTION

The FAMCLCFG is used to program parameters for the model FAMCL CC-Link Master

- Module (Yokogawa Electric PLC FA-M3 use). The following major functions are available: 1) Edit parameters
- 2) Download parameters to the device, upload parameters from the device

3) Save parameters as files, read parameters from files

1.2 CORRESPONDING VERSION

This users manual supports the FAMCLCFG Ver. 1.04.XX.

1.3 PC REQUIREMENTS

The following PC performance is required for adequate operation of the software program.

	Windows 10 (32-bit, 64-bit)
OS	Windows 11 (64-bit)
	The software may not operate adequately in certain conditions.
Communication port	COM port (COM1 through COM32)
Programming tool	PC with FA-M3 Programming Tool WideField3 version R.4 or later.

1.4 NUMBER OF CONNECTABLE MODULES

The FAMCLCFG recognizes maximum 2 units of FAMCL on a FA-M3 main unit, and does not recognize the FAMCL on a sub unit.

1.5 DRIVER SOFTWARE

The FAMCLCFG runs on the PC where the FA-M3 Programming Tool WideField3^{*1} (R.4 or later) is installed. *1. FA-M3 Programming Tool provided by Yokogawa Electric Corporation

1.6 INSTALLING & DELETING THE PROGRAM

1.6.1 TO INSTALL THE PROGRAM

The program is provided as compressed archive. Decompress the archive and execute 'setup.exe'. Follow the instructions on the screen to install the program. Note that it is required to log on as administrator to install the program.

1.6.2 TO DELETE THE PROGRAM

For Windows 10, open Settings from Start menu > Apps > Apps & features. Select the TC10CFG from the program list and click [Uninstall] button. Follow the instructions on the screen to uninstall the program. For Windows 11, open Settings from Start menu > Apps > Installed apps. Select the [...] of TC10CFG from the program list and click [Uninstall] button. Follow the instructions on the screen to uninstall the program.

2. GETTING STARTED

Open the FAMCLCFG on the Windows PC.

2.1 FILE (F) MENU

File(F)		
Ope	en(O)	
Sav	re(S)	
Sav	Save As(A)	
Ope	Open CSV File(C)	
Sav	e CSV File(V)	
Exit	:(X)	

2.1.1 FILE (F) > OPEN (O)

Open an existing configuration file. Not usable in selecting a slave station.

2.1.2 FILE (F) > SAVE (S)

Overwrite and save current master station settings. Usable after Open or Save As.

2.1.3 FILE (F) > SAVE AS (A)

Name and save current master station settings.

2.1.4 FILE (F) > OPEN CSV FILE (C)

Open a configuration file in a CSV text format. Not usable in selecting a slave station.

2.1.5 FILE (F) > SAVE CSV FILE (V)

Save current master station settings to a CSV text format file.

CAUTION

A CSV text format file can be read and edited on other application software. Note the followings:

- 1. The character code in CSV files is Unicode (UTF-8).
- Application software needs to conform to Unicode (UTF-8) to edit the files.
- 2. When increasing or decreasing the number of connected slave stations in editing, also modify the item 'number of connected stations'.

2.2 EDIT (E) MENU

Edit(E)		
Master Station(M)	•	Setting(S)
Slave Station(S)	•	Add by csp(C)
		Add by csp+(P)
		Add generic device(N)
		Delete(D)

2.2.1 EDIT (E) > MASTER STATION (M) > SETTING (S)

Select the above menu, and the master station view will appear.

2.2.2 EDIT (E) > SLAVE STATION (S) > ADD BY CSP (C)

Set a slave station using a CSP file.

Select the above menu, and the following window will appear. Select a device and click [OK] button.

	Add Slave Station b	y csp	
lect a device ti	o be added.		
evice			
Vendor	all	¥	
Device type	all	~	
54U2[54U2A(1 B9CWTU2[B90	occupied station)] CM/TU2 A(A occupied station)]		
K30W102[K3	JWT02_N(+ occupied station)]		
	54U2A(1 occupied station)		
The second second			
ALL			
		OK Gancel	
Update CSP f	ile information Update		
		\backslash	
		,,	
files (device	models) are listed	Information of the self	ected CSP file is sh

2.2.2.1 VENDOR

Vendor	all	~
	all M•SYSTEM CO.LTD. Yokogawa Electric Corporation	

Select a Vendor and their CSP files will be listed.

2.2.2.2 DEVICE TYPE

Device type	all	~
	all	~
	PLC	
	personal computer	
	Digital I/O	
	Analog I/O	
	Positioning module	
	Temperature Controller	
	Digital Indicators	
	ID .	
	Serial Converter	
	CC-Link-CC-Link/LT Bridge	
	Protocol Converter	
	Inverter	
	Servo	
	NU Pabat	
	Rower Distribution Controller	
	Sensor	
	Actuator	
	Barcode	
	Indicator(weight)	
	High Speed Counter	
	Key Switch	
	Prótocol Analyzer	
	Space Optical Repeater	
	Conveyance Controller	
	Power Control Device	
	Control Device for Welding Machine	
	Gas Sensor	
	Solenoid Valve	~

Select a device type and its CSP files will be listed.

2.2.2.3 UPDATING CSP FILE INFORMATION

Update CSP file information	Update

When new CSP files are saved in the CSP folder, click [Update] button to update the vendor information files.

2.2.3 EDIT (E) > SLAVE STATION (S) > ADD BY CSP+ (P)

Set a slave station using a CSP+ file.

Select the above menu, and the following window will appear. Select a device and setting, and click [OK] button.

	Add Slave Station by csp+
Select a device t	b be added.
Device	
Vendor	all 🗸
Device type	all 🗸
54U2[Multi Po R9CWTU2[Mu	wer Monitoring Unit] ti Power Monitoring Unit]
	Multi Power Monitoring Unit
10000000000000000000000000000000000000	54U2, Remote device, 1 occupied sta, Ver.1.10,
and the second	04U2, Remote device, 1 occupied sta, ver.2.00, 8 exp. cycle
Under COD	
Update CSP+	
	/
When a COD of	
when a USP + fi	ie nas piurai settings, select one.

2.2.3.1 UPDATING CSP+ FILE INFORMATION

Update CSP+ file information	Update

When new CSP+ files are saved in the CSPP folder, click [Update] button to update the vendor information files.

2.2.4 EDIT (E) > SLAVE STATION (S) > ADD GENERIC DEVICE (N)

Use when CSP and CSP+ files do not exist.

Add	Generic Device
Select station type. Remote I/O station	~
	OK Cancel

2.2.4.1 STATION TYPE

Select station type.	
Remote I/O station	~
Remote I/O station	
Remote device station (Ver.1) Remote device station (Ver.2)	

Select one among following 3 station types:

(1) Remote I/O station

(2) Remote device station (CC-Link Ver.1.XX)

(3) Remote device station (CC-Link Ver.2.XX)

After selecting a station type, set 'number of occupied stations' and 'expanded cyclic setting' (with Ver. 2 only) in the slave station view.

Example: To connect the Remote I/O model R3-NC3,

- Select 'remote device station (CC-Link Ver. 2)' in the dialog box 'Add Generic Device' .
- Set 'number of occupied stations' to 4 in the slave station view.
- Set 'station No.' and 'expanded cyclic setting' in the slave station view to those set with the switches on the R3-NC3.

2.2.5 EDIT (E) > SLAVE STATION (S) > DELETE (D)

Delete a selected slave station. The slave station numbers will be closed up to reassign. Deleting the master station is not available.

2.3 ONLINE (T) MENU

Set communication with a FA-M3 CPU module, connect and disconnect the communication.

Or	line(O)	
	Com Se	tting(S)
	Connec	t(C)
	Disconn	ect(D)
	Monitor	Slave Station(M)

2.3.1 ONLINE (T) > COM SETTING (S)

Set Com Port			
Communication port Ethernet : 192.168.3.71	2 🌲	Setup	
[OK	Cancel	

Set communication conditions per port. The above example shows the port No. 2 with Ethernet communication and the destination IP address 192.168.3.71.

Set a communication port No. to select other communication conditions.

2.3.1.1 ONLINE (T) > COM SETTING (S) > [SETUP] BUTTON

Set communication conditions of the selected port No.

Communications Setup
Media
USB USB communication
Connection timeout 10 🗼 sec CPU module 1 🚖 Choose RS-232C when using USB/RS-232C converter cable (KM13).
 RS-232C (when using KM13) RS-232C communication
Communication method Automatic recognition Fixed 115200 bps, no parity
Communication timeout 3 sec COM port 1
Number of retries
C Ethernet Ethernet communication
Destination IP address 0 . 0 . 0 . 0 CPU module 1
Connection timeout 20 🜲 sec
OK Cancel

2.3.1.2 MEDIA

Select a medium.

- USB
- RS-232C (when using KM13)
- Ethernet

2.3.1.3 USB COMMUNICATION - CONNECTION TIMEOUT

Timeout (second) in connecting communication. 10 seconds fixed.

2.3.1.4 USB COMMUNICATION - CPU MODULE

Set the destination CPU module No. Set to 0, and the CPU module to which the USB cable is connected will be connected. (Setting range: 0 to 4)

2.3.1.5 RS-232C COMMUNICATION - COMMUNICATION METHOD

Select 'automatic recognition' or 'fixed'.

With 'automatic recognition', the settings including baud rate are configured automatically. With 'fixed', select communication conditions from the drop-down list.

Fixed	115200 bps, no parity 🗸 🗸
	9600 bps, even parity 9600 bps, no parity 19200 bps, even parity 19200 bps, no parity 38400 bps, even parity 20400 bps, even parity
	57600 bps, even parity 57600 bps, no parity 115200 bps, even parity 115200 bps, no parity

2.3.1.6 RS-232C COMMUNICATION - COMMUNICATION TIMEOUT

Set timeout for the RS-232C communication. (Setting range: 1 to 100 seconds)

2.3.1.7 RS-232C COMMUNICATION - COM PORT

Set COM port No. of the PC for the RS-232C communication. (Setting range: COM1 to COM32)

2.3.1.8 RS-232C COMMUNICATION - NUMBER OF RETRIES

Set number of times to retry the RS-232C communication. (Setting range: 0 to 100)

2.3.1.9 ETHERNET COMMUNICATION - DESTINATION IP ADDRESS

Set IP address of a destination CPU module.

2.3.1.10 ETHERNET COMMUNICATION - CPU MODULE

Set destination CPU module No. (Setting range: 1 to 4)

2.3.1.11 ETHERNET COMMUNICATION - CONNECTION TIMEOUT

Set timeout in connecting. (Setting range: 1 to 120 seconds)

2.3.2 ONLINE (T) > CONNECT (C)



Select the above menu, and the above confirmation dialog box will appear. Click [Yes] button, and the communication will start with the selected port No. setting.

8	Are you sure to stop program? FAMCLCFG may not function properly if the program is not stopped.	
	<u>Y</u> es <u>N</u> o	

Then the above confirmation dialog box will appear to stop the program of the CPU module. Even if you click [No] button, you can continue to use the FAMCLCFG. However, the FAMCLCFG may not function properly when the CPU module program rewrites Y relays of the FAMCL.

Also depending the CPU module settings, Y relays of the installed modules may be reset in stopping the program. Then the CC-Link communication will be stopped.

2.3.3 ONLINE (T) > DISCONNECT (D)

Disconnect the communication.

The following confirmation dialog box will appear to start the program of the CPU module. If you click [No] button, the communication will be disconnected with the program stopped.

×	t
Are you sure to start program?	
<u>Y</u> es <u>N</u> o]

2.3.4 ONLINE (T) > MONITOR SLAVE STATION (M)

When the CC-Link communication is disconnected, the following confirmation dialog box will appear to connect the communication.

If you click [No] button, monitoring will not be available.

×
Are you sure to connect CC-Link communication?
<u>Y</u> es <u>N</u> o

The selected slave station information will appear (and be updated approximately every second).

Master station to monitor			Slave station to monitor
Monitor Master station1 Select view	#03 Remote device stat	tion	Select data to monitor
	SLAVE DATA		Monitorviou
TP1	ПЗН ЛН		Monitor view
TP2	42H		
Firmware version	5H		
TP3	4H		
ST1	OH		
ST2	20H		
	Oł		

- Rx monitor

Ionitor	
Master station1	#01 Remote I/O station
Select view	
◎ RX ◎ RY ◎ R₩ ◎	RWw 🔘 Device information
ITEM	SLAVE DATA
RX 000 - 00F	000000000010000
RX 010 - 01F	000000000000000
	ОК

- RWr monitor

Select view RX RY RWr RWw Device information ITEM SLAVE DATA RWr 001 5000 RWr 002 4999 RWr 003 4999 RWr 004 4999	Master station	#03 Remote device station
RX RY RWr RWw Device information ITEM SLAVE DATA RWr 001 5000 RWr 002 4999 RWr 003 4999 RWr 004 4999	Select view	
ITEM SLAVE DATA RW+ 001 5000 RW+ 002 4999 RW+ 003 4999 RW+ 004 4999	🔘 RX 🔘 RY 💿 RWr 🤘) RWW () Device information
RWr 001 5000 RWr 002 4999 RWr 003 4999 RWr 004 4999	ITEM	SLAVE DATA
RWF 002 4999 RWF 003 4999 RWF 004 4999	RWr 001	5000
RWr 003 4999 RWr 004 4999	RWr 002	4999
RWr 004 4999	RWr 003	4999
	RWr 004	4999

Click [OK] button to quit the monitor. The confirmation dialog box will appear to disconnect the CC-Link communication.



If you click [No] button, the CC-Link communication will not be disconnected and continue.

* When an error occurs in starting the CC-Link communication and the ERR LED turns on, it will not turn off even when the communication is disconnected. It turns on until the CC-Link is normally communicated.

2.4 LANGUAGE (L) MENU

Set a language, and the setting will be enabled at the next startup.

Language(L)	
Japanese(J)	
English(E)	

2.5 BASIC VIEW (MASTER STATION)

The following view appears after startup, where the master station is selected.

	Menu bar	Application and version No.
	FAMCLCFG Ver.1.04.15	- - ×
File(<u>F)</u> Edit(<u>E)</u> Online(<u>O</u>)	Language(<u>L)</u>	
Master Sta.	Master Station (FAMCL)	
	Unit No. 🛛 😫 Slot No. 🛛 1 🖨	
	Number of connected stations	
	Retry count 3🛃	
	Automatic reconnection station count	
	Transmission speed 156kbps 🗸 🗸	
	Operation mode when CPU is down	
	Stop Continue	
	Input from data link error station	
	Upload Download Au	to station No. assignment
Disconnected		
Disconnected		
	<u> </u>	<u> </u>
Communication status,	CC-Link configuration of the master station	Settings of master station (FAMCL) or
CPU module model	(FAMCL) and slave stations.	Slave stations.
	Select a station.	Configure the settings.

2.5.1 UNIT NO., SLOT NO.



The unit No. and slot No. of the selected master station are indicated.

Unit No. 0 to 7

Slot No. 1 to 16

The information is taken from the CPU module in connecting communication.

2.5.2 NUMBER OF CONNECTED STATIONS



Total number of the slave stations set in the selected master station is indicated. Not modifiable.

2.5.3 RETRY COUNT



Set number of times to retry polling a slave station when it does not reply. (Setting range: 1 to 7)

2.5.4 AUTOMATIC RECONNECTION STATION COUNT



Set number of slave stations to reconnect by a single link scan when data link error stations are reconnected. (Setting range: 1 to 10)

2.5.5 TRANSMISSION SPEED



The transmission speed of the CC-Link system set in the master station is indicated. The transmission speed of the FAMCL is set with the rotary switch on the device and is not configurable with the FAM-CLCFG.

2.5.6 OPERATION MODE WHEN CPU IS DOWN



Set the CC-Link communication when a CPU error of the FAMCL occurs.

Stop The CC-Link data link communication is stopped when a CPU error occurs. Continue The CC-Link data link communication continues when a CPU error occurs.

2.5.7 INPUT FROM DATA LINK ERROR STATION



Set input data processing from a data link error station.

Clear input data The input from the data link error station is cleared. (RX area cleared, RWr area not cleared) Hold input data The input from the data link error station is held.

2.5.8 AUTO STATION NO. ASSIGNMENT

Auto station No. assignment

Each slave station No. to be set in the FAMCL is calculated from station Nos. and number of occupied stations, and assigned.

The station No. on each slave station needs to be changed separately.

Enabled (checked) Assigns slave station Nos. closed up automatically.

The station No. setting in the slave station view will be disabled.

It is necessary to change the No. on each slave station according to the setting.

Disabled (unchecked) Assigns slave station Nos. manually.

* In clicking [Download] button (writing settings to the FAMCL), overlap of the station Nos. is checked. If a number overlaps, a warning message appears and downloading is stopped.

2.5.9 UPLOAD, DOWNLOAD



Upload Reads settings of the selected master station (FAMCL). Download Writes settings to the selected master station (FAMCL).

* The buttons are disabled (grayed out) in the following cases:

- in disconnecting, or

- in processing upload or download.

* When you download in connecting the CC-Link communication, the following dialog box appears to disconnect the CC-Link communication after writing the settings and before updating the settings in the FAMCL.

?	CC-Link communication is connected. Are you sure to disconnect CC-Link communication to apply new setting?	
	<u>Y</u> es <u>N</u> o	

If you click [Yes] button, the CC-Link communication will be disconnected, the settings will be updated and reflected in connecting the next CC-Link communication. (The settings will be reflected also when the power of the FAMCL is restarted.) If you click [No] button, the downloaded settings are not updated at that time. They will be updated and reflected when the power of the FAMCL is restarted.

2.6 BASIC VIEW (SLAVE STATION)

Select a slave station in the configuration area, and the following view showing the selected slave station will appear.

			A device image appears in setting from a CSP or CSP + f	file.
<i>m</i>		FAMICLO	CFG Ver.1.04.16 – 🗖 🗖	×
File(<u>F</u>) Edit(<u>E</u>)	Online(<u>O</u>)	Language(<u>L</u>)		
⊡ ·· Master Sta. (#01) 54U2 				
		ITEM	SET VALUE	
		Station No.	1	
		Device model number	54U2	
		Device type		
		Station type	Remote device station	
		Device comment	Multi Power Monitoring Unit	
		Vendor	Msystem	
		Reserved/Error invalid station	🗸	
		CC-Link version	Ver.2	
		Number of occupied stations	1	
		Expanded cyclic setting	8	
		Remote station points RX/RY	128 points	
		Remote station points RWw/R	32 points	
Disconnected				

2.6.1 STATION NO.

The slave station No. is indicated.

When the auto station No. assignment is enabled, the station No. setting is disabled here (background color: white). When the auto assignment is disabled, the setting is enabled (background color: gray).

2.6.2 DEVICE MODEL NUMBER

The model No. of the slave station device is indicated. Not modifiable.

2.6.3 DEVICE TYPE

The remote device type that CC-Link Partner Association defines is indicated. Not modifiable.

2.6.4 STATION TYPE

Station type	Remote device station	~
	Remote I/O station	
	Remote device station	

The station type ('remote I/O station' or 'remote device station') is indicated. Not modifiable in setting from a CSP or CSP+ file.

2.6.5 DEVICE COMMENT

A slave station comment is indicated.

Modifiable. The device comment is saved in a configuration file, but not written to the FAMCL. In uploading from the FAMCL, a device comment is created based on the station type information.

2.6.6 VENDOR

A vendor of the slave station is indicated. Without vendor information, '----' is indicated. Not modifiable.

2.6.7 RESERVED/ERROR INVALID STATION

Reserved/Error invalid station		×
	Reserved station Error invalid station	

Set the slave station as a reserved or error invalid station. Otherwise set '-----'. Modifiable.

2.6.8 CC-LINK VERSION

CC-Link version	Ver.2	~
	Ver.1	
	Ver.2	

Set the CC-Link version No.

Not modifiable in setting from a CSP or CSP+ file.

2.6.9 NUMBER OF OCCUPIED STATIONS

Number of occupied stations	1 v
	1 2 3 4

Set number of occupied stations.

Not modifiable in setting from a CSP or CSP+ file.

2.6.10 EXPANDED CYCLIC SETTING

Expanded cyclic setting	1 ~
	1
	2
	8

Set expanded cyclic.

Configurable only with the CC-Link Ver. 2. Not modifiable in setting from a CSP or CSP+ file.

2.6.11 REMOTE STATION POINTS RX/RY

Maximum number of points by the number of occupied stations and expanded cyclic is indicated. Not modifiable.

2.6.12 REMOTE STATION POINTS RWw/RWr

Maximum number of points by the number of occupied stations and expanded cyclic is indicated. Not modifiable.

CAUTION

In adding a slave station from a CSP or CSP+ file, the items other than 'station No.' and 'reserved/error invalid station' are not modiable. Besides them, 'CC-Link version', 'number of occupied stations' and 'expanded cyclic setting' are also modifiable for an uploaded slave station.

3. FAMCLCFG FILES

3.1 FAMCLCFG FOLDERS

The FAMCLCFG creates folders in the Documents folder in the PC in starting up, unless the FAMCLCFG folder already exists.

Folder configuration



3.2 CSP FILES

CSP files are definition files for the CC-Link devices. Save CSP files in the CSP folder. Save image (bmp) files in the Image folder. * Do not change the CSP and image file names.

3.3 CSP+ FILES

CSP+ files are definition files for the CC-Link devices. Save CSP+ files in the CSPP folder. Save image (bmp) files in the Image folder. * Do not change the CSP+ and image file names.

3.4 CONFIGURATION FILES

The extension of the configuration files the FAMCLCFG creates is cfg.

4. REMAKRS

4.1 SLAVE SETTINGS TO BE SAVED AND DISPLAY ITEMS

ITEM	UPLOAD FROM FAMCL	CONFIGURATION FILE	CONFIGURATION FILE (csv)
Station No.	1	1	V
Device model number	×	1	×
Device type	×	1	×
Station type	1	1	√
Device comment	×	1	×
Vendor	×	1	×
Reserved/error invalid station	1	1	1
CC-Link version	1	1	1
Number of occupied stations	1	V	1
Expanded cyclic setting	√	1	√
Remote station points RX/RY	1	1	×
Remote station points RWw/RWr	√	1	×
Path of image files	×	J	×

In uploading setting information from the FAMCL, the device model number, vendor and image file are not read, and such information is not shown on the slave station view.

In creating a configuration file after uploading setting information from the FAMCL, the device model number, vendor and image file are not written to the configuration file.

4.2 VERSION HISTORY

Ver.1.00.XXfirst version

Ver.1.01.XXmonitor function added

Ver.1.04.XXEnglish display, CSV configuration file and slave station monitor supported.

5. APPENDIX

5.1 APPENDIX 1 GENERIC TERMS AND ABBREVIATIONS

This manual uses following abbreviations and terms.

GENERIC	DESCRIPTION	
TERM / ABBREVIATION		
Master station	The station that controls the entire CC-Link system. One master station is required per system and	
	the FAMCL is the master station. The station number for this station is fixed to 0.	
Remote station	A generic station name for remote I/O stations and remote device stations	
Remote I/O station	A remote station that handles bit unit data only	
Remote device station	A remote station that handles both bit unit and word unit data	
Slave station	Remote I/O station, remote device station and local station	
Reserved station	Slave stations that exist on the CC-Link network parameters set in the master station but are not ac-	
	tually connected. In setting reserved stations, the data link can be performed without error. (Data link	
	to the reserved stations is not performed.) Such a slave station, if not specified as a reserved station,	
	is treated as data link error station.	
Error invalid station setting	With this setting, a slave station that is powered off is not treated as data link error station.	
Station	A device that exists on the CC-Link system, where the station number assignment can be from 0 to	
	64.	
Number of stations	The total station numbers occupied by all slave stations connected in the CC-Link system	
Station number	The number assigned to each station connected to the CC-Link system	
	0: master station No.	
	1 to 64: slave station No.	
Number of occupied stations	The CC-Link system allows 32 points of bit data I/O respectively and 4 points of word data I/O	
	respectively per station. Each slave station needs to occupy a certain number of stations correspond-	
	ing to the information sent to or received from other stations, which is called number of occupied	
	stations.	
Automatic reconnection	A function that a unit not joining the data link due to power off recovers the normal status and auto-	
	matically joins the data link	
RX	Information entered in bit units from the remote station to the master station	
RY	Information output in bit units from the master station to the remote station	
RWr	Remote register (read area for CC-Link)	
	Information entered in 16-bit units from the remote device station to the master station	
RWw	Remote register (write area for CC-Link)	
	Information output in 16-bit units from the master station to the remote device station	

5.2 APPENDIX 2 TROUBLESHOOTING

PROBLEM	CHECK ITEM	REMEDY	
Unable to perform data link for the	Aren't there any disconnected cables?	Check the cable connection visually or with	
entire system.		continuity test.	
	Are the terminating resistors connected to	Connect the supplied terminating resistors to	
	the terminal stations located at each end of	the terminal stations at each end of the CC-Link	
	the CC-Link system?	system.	
	Are appropriate terminating resistors con-	Connect terminating resistors that match the	
	nected?	cable type to the terminal stations at each end of	
		the CC-Link system.	
	Doesn't an error occur at the master sta-	Check the status indicator LEDs of the FAMCL.	
	tion?		
Unable to receive input from a remote	Does the remote I/O station perform data	Check the LED of the remote I/O station.	
I/O station.	link?		
	Is the slave station information set with the	Confirm that the following parameter conforms to	
	FAMCLCFG correct?	that of the station:	
		- Station type: remote I/O station	
	Does the transmission speed coincide with	Check the transmission speed.	
	that set with the FAMCL?		
	Does the master station recognize the	Select Online > Monitor slave station from the	
	remote I/O station?	menu of the FAMCLCFG to confirm.	
	Isn't the station set as a reserved station?	Check the settings of the slave station with the	
		FAMCLCFG.	
	Aren't there any overlapped station num-	Check the station No. setting.	
	bers?		
Unable to output data from a remote	Is data written to the correct address of	Check the sequence program.	
I/O station.	remote output RY (buffer memory)?		
Unable to receive data to the remote	Does the remote device station perform	Check the LED of the remote device station.	
register RWr in a remote Device	data link?		
station.	Does the remote I/O station perform data	Check the LED of the remote I/O station.	
	link?		
	Is the slave station information set with the	Confirm that the following parameters conform to	
	FAMCLCFG correct?	those of the station:	
		- Station type: remote device station	
		- CC-Link version	
		- Number of occupied stations	
		- Expanded cyclic setting (in case of Ver. 2)	
	Does the transmission speed coincide with	Check the transmission speed.	
	that set with the FAMCL?		
	Does the master station recognize the	Select Online > Monitor slave station from the	
	remote device station?	menu of the FAMCLCFG to confirm.	
	Isn't the station set as a reserved station?	Check the settings of the slave station with the	
		FAMCLCFG.	
	Aren't there any overlapped station num-	Check the station No. setting.	
	bers?		
Unable to write data to the remote	Is data written to the correct address of	Check the sequence program.	
register RWw in a remote device	remote register RWw (buffer memory)?		
station			

5.3 APPENDIX 3 CSV FILE FORMAT

This section describes the file format in saving settings as a CSV text format file.

The character code is Unicode (UTF-8). In order to edit a file, use the software that can read and write the Unicode files.

- 1. application (FAMCLCFG), FAMCLCFG
- 2. file version (1), 1
- 3. Number of connected stations (1 64), 3
- 4. Retry count (1 7), 3
- 5. Automatic reconnection station count (1 10), 1
- 6. Operation mode when CPU is down (0:Stop / 1:Continue), 1
- 7. Input from data link error station (0:Clear / 1:Hold), 0
- Station No. (1 64), Station type (0:Remote I/O / 1:Remote device), Reserved/Error invalid station (0:----- / 1:Reserved / 2:Invalid), CC-Link version (1:Ver.1 / 2:Ver.2), Number of occupied station (1 - 4), Expanded cyclic setting (1/2/4/8)
- 9. 1,0,0,1,1,1
- 10. 2,1,0,1,1,1
- 11. 3,1,0,2,1,1
- 1 to 2: CSV file information. Do not modify.
- 3 to 7: Master (FAMCL) settings. Editable within the setting ranges.
 - 8: Setting items of slave station
 - 9: Settings of the slave station No. 1. Editable within the setting ranges.
 - 10 -: Settings of the slave station No. 2 and following stations. Editable within the setting ranges.
- * In increasing or decreasing the slave stations, also modify the item 'number of connected stations'.