

Industrial automation

Elincom Group



FX2N-32CCL-NP CC-Link SYSTEM LOCAL BLOCK

HARDWARE MANUAL

JY992D96001A

This manual contains text, diagrams and explanations which will guide the reader in the correct installation and operation of the FX2N-32CCL-NP CC-Link SYSTEM LOCAL BLOCK. It should be read and understood before attempting to install or use the unit. Further information can be found in the FX series PLC hardware manuals.

Guidelines for the safety of the user and protection of the FX2N-32CCL-NP CC-Link SYSTEM LOCAL BLOCK

- If in doubt at any stage during the installation of the FX2N-32CCL-NP CC-Link SYSTEM LOCAL BLOCK always consult a professional electrical engineer who is qualified and trained to the local and national standards. If in doubt about the operation or use of the FX2N-32CCL-NP CC-Link SYSTEM LOCAL BLOCK please consult the nearest Mitsubishi Electric distributor.
- Under no circumstances will Mitsubishi Electric be liable or responsible for any consequential damage that may arise as a result of the installation or use of this equipment.
- All examples and diagrams shown in this manual are intended only as an aid to understanding the text, not to guarantee operation. Mitsubishi Electric will accept no responsibility for actual use of the product based on these illustrative examples.
- Owing to the very great variety in possible application of this equipment, you must satisfy yourself as to its suitability for your specific application.

Note's on the symbology used in this manual

At various times through out this manual certain symbols will be used to highlight points of information which are intended to ensure the user's personal safety and protect the integrity of the equipment. Whenever any of the following symbols are encountered, its associated note must be read and understood. Each of the symbols used will now be listed with a brief description of its meaning.

Hardware warnings



1) Indicates that the identified danger WILL cause physical and property damage.

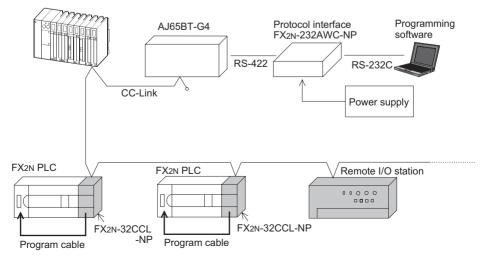
2) Indicates that the identified danger could POSSIBLY cause physical and property damage.

1. INTRODUCTION

The FX_{2N}-32CCL-NP is the interface block that connects the FX series PLC to the CC-Link system. It is connected as a local station.

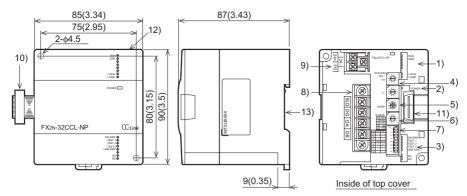
Master station Station which controls the remote I/O station, remote device station, and local stations

Master Station



1.1 Dimensions and Setting

Dimensions: mm (inches) MASS (Weight): 0.4 kg (0.88 lbs)



Number	Name			Description		
1)	LED	LED		Description	LED :	status
	indicators 1	name		Description	Normal	Error
	RUN ERR. D L L L RUN L RUN L L RR		ON : Module is OFF: Watchdog	s normal. g timer error has occurred.	ON	OFF
			the stations set ON : Com occu Flashing : Com	ommunication status with in the parameters. munication error has irred in all stations. munication error has irred in some stations.	OFF	ON or flashing
		L RUN	ON:Data link (host stat	is being executed ion).	ON	OFF
		L ERR.	occu Flashing : The to 7)	munication error has rred (host station). settings of the switches 4) are changed while the er is ON.	OFF	ON or flashing
2)	Power indictor	POWER	ON: 24V DC is	s supplied from the outside.	ON	OFF
3)	LED	SW ERR.	ON : Switch se	etting error has occurred.	OFF	ON
	sw ERR.	TEST 1 TEST 2 TEST 3	Test result indic	ation	OFF except	t during test
	SW ERR. TEST 1 TEST 2 TEST 3 LINE ERR. SD	LINE ERR.		is broken the transmission ffected by noise, etc.	OFF	ON
		SD	ON: Data is be	eing transmitted.	ON	OFF
		RD	ON: Data is be	eing received.	ON	OFF
	switch STATION NO. $\times 10$ $\bigcirc 0 \\ \bigcirc 0 \\ 0 \\$	 Setting range> Local station : 1 to 64 If "65" or larger number is set, the "SW" and "L ERR." LED ir 				ors turn ON.
5)	Mode setting	Sets the or	peration status o	f the module. (Default settin	g at shipme	nt: 0)
- /	switch	Number	Name	Descrip	•	/
		0	Online	Sets connection to data lin	k.	
		1	(Unusable)			
		2	Offline	Sets disconnection from da	ata link.	
		3	(Unusable)			
	MODE	4	(Unusable)	—		
	23456 94 94 94 95	5	(Unusable)	—		
	1008×	6	Hardware test			
		7 8 to A	(Unusable) (Unusable)	Setting error (The SW LED Used in PLC internal operation		rns ON.)
			(Unusable)	Setting error (The SW LED		rns ON)
6)	6) Transmission		· ,			
- /	speed setting	Number	transmission speed of the module. (Default setting at shipm Setting contents			
	switch	0		156 kbps		
	B RATE	1		625 kbps		
	0 156K 1 625K	2		2.5 Mbps		
	2 2.5M 3 5M	3		5 Mbps		
	4 10M	4	10 Mbps			
		5 to 9	Setting error (T	he SW and L ERR. LED inc	licators turn	ON.)

Number	Name		Description				
7)	Condition	Sets the op	peration condition. (Default setting at shipme	ent: All OFF)			
	setting switch	Number	Setting description	Switch	status		
	SWOFF ON ON→			ON	OFF		
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	SW1 to SW3	(Unusable)	Alway	s OFF		
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SW4	Input data status in data link faulty station	Keep (HLD)	Clear (CLR)		
		SW5	Number of occupied stations	4	1		
		SW6 to SW8	(Unusable)	Alway	s OFF		
8)	SLI DG DA DB	Connects dedicated CC-Link cables to enable data link. For the connection method, refer to Section 2.3. The terminals SLD and FG are connected inside.					
9)	Terminal block $ \begin{array}{c} 24 \\ \hline Fe \\ \hline Fe \\ \hline \end{array} $	erminal block Connects the power supply to operate the master block. $\frac{24}{r_0}$ $\frac{24}{r_0}$ $\frac{24}{r_0}$					
10)	Extension bus cable	Connects t	he PLC.				
11)	Expansion bus port	Connects an extension equipment.					
12)	Program port	A connector for program cable					
13)	DIN rail mounting groove	DIN46277:	DIN46277: DIN rail mounting groove of 35 mm (1.38") in width				

2. Installation and wiring



INSTALLATION PRECAUTIONS

- Use the module in the environment described in the HARDWARE MANUAL General Specification. Do not use the PLC in a place with dust, soot, conductive dust, corrosive gas or combustible gas, place exposed to high temperature, condensation, wind or rain or place with vibration or impact. Using the module outside the range of the general specification may result in electrical shock, fire, malfunctions, or may damage the PLC.
- When drilling screw holes or performing wiring, make sure that cutting chips, wire chips or other foreign matter does not enter the ventilation window of the module. Such matter may cause fire, failure or malfunction.
- When the installation work is completed, remove the dust protection sheet from the ventilation window of the PLC.
 - If the sheet remains attached, it may cause fire, failure or malfunction.
- Securely connect extension cables to specified connectors. Poor contact may cause malfunction.

WIRING PRECAUTIONS

- Â
- Before beginning any installation or wiring work, make sure all phases of the power supply have been shut down from the outside.
 Incomplete shutdown of the power supply phases may cause electrical shock or damage in the module.
- Following an installation or wiring work, when turning on the power supply and operating the PLC, make sure that the terminal cover provided as an accessory has been attached to the module.
 - A missing cover may cause electrical shock.
- For the CC-Link system, use dedicated cables specified by the manufacturer. The performance of the CC-Link system cannot be guaranteed with any cable other than the ones specified by the manufacturer. With wiring outside the specification range, normal data transfer cannot be guaranteed.
- Make sure to fix communication cables and power cables connected to the module by placing them in the duct or clamping them.
 Cables not placed in duct or not clamped may hang or shift, allowing them to be accidentally pulled, which may result in malfunction or damage to the module and the cables.
- The number of times to disconnect/connect the program cable for FX2N-32CCL-NP should be kept to a minimum.

• When disconnecting a communication/power cable connected to the module, do not hold the cable area.

For a cable with connector, hold the connector attached to the module.

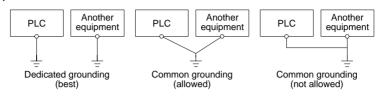
For a cable connected to a terminal block, loosen screws of the terminal block, then disconnect the cable.

If a cable is pulled while it is connected to a module, the module may malfunction or the module and the cable may be damaged.

WIRING PRECAUTIONS



 Perform Class D grounding (solid grounding) with a wire of 2 mm² or more to the grounding terminal in the PLC main units. However, never perform common grounding with a high voltage system.



 Do not bundle control cables and communication cables with the main circuit and power cables. Keep control cables and communication cables at least 100 mm away from the main circuit and power cables.

Otherwise, electric noise may cause a malfunction.

2.1 Installation

Install the FX2N-32CCL-NP on the right side of an FX2N Series main unit, extension unit, or other extension block.

The FX_{2N}-32CCL-NP can be installed using a DIN rail (DIN 46277, width: 35 mm (1.38 in.)) or directly with M4 (0.16 in.) screws.

In the case of direct installation, provide space of 1 to 2 mm (0.04 to 0.08 in.) between units.

2.2 Dedicated CC-Link Cable

Use dedicated CC-Link cables in the CC-Link system.

If any other cable is used, the performance of the CC-Link system cannot be guaranteed.

2.3 Module Wiring with Dedicated CC-Link Cables

This section describes the connection method of dedicated CC-Link cables.

- The cables can be connected without regard to the station number.
- Make sure to connect a terminal resistor (offered as an accessory of the module) between the DA and DB terminals in the modules at both ends.
- In the CC-Link system, the terminal resistor to be connected varies depending on the cable used.
 - When a dedicated CC-Link cable is used: 110 Ω , 1/2 W (brown, brown and brown)
 - When a dedicated high-performance CC-Link cable is used: 130 Ω , 1/2 W (brown, orange and brown)
- Star connection is not allowed.
- The figure below shows the connection method.

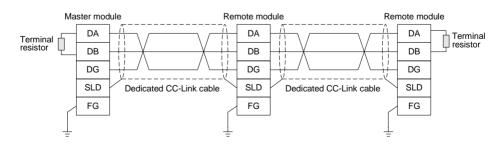
Important

Make sure to use only one type of cable (dedicated CC-Link cables OR dedicated CC-Link highperformance cables).

If both types of cables are used together, normal data transmission cannot be guaranteed.

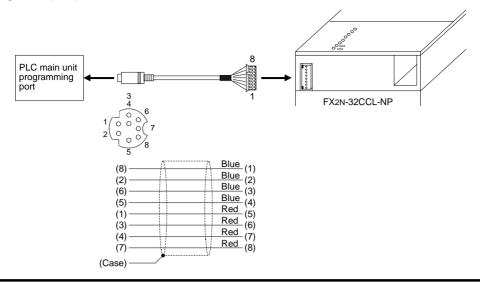
Point

The shielded dedicated CC-Link cable should go through the terminals SLD and FG in each module, and both ends should be grounded (Class D = solid grounding). The terminals SLD and FG are connected inside the module.



2.4 Connection diagram of program cable

Length: 1 m (3.3 ft)



3. SPECIFICATION

3.1 General Specification

Dielectric strength: 500V AC for 1 minute (between the case and the PLC ground) Other specification is equivalent to that of the PLC main unit.

3.2 Performance Specification

Item	Specification		
Applicable function	Local station function (The master station and standby master station functions are not provided.)		
CC-Link version	Ver.1.10		
Transmission speed	Selectable (by rotary switch) among 156 kbps, 625 kbps, 2.5 Mbps, 5 Mbps and 10 Mbps		
Station number	1 to 64 (set by rotary switch)		
Maximum total cable length (maximum transmission distance)	1,200 m maximum Varies depending on the transmission speed.		
Number of link points per station	Remote I/O station : Remote I/O = 32/32 (RX/RY) points Remote device station : Remote I/O = 32/32 (RX/RY) points Remote register = 4 (RWw) points Remote register = 4 (RWr) points		
Transmission path type	Bus (RS-485)		
Connection cable	Dedicated CC-Link cable/Dedicated high-performance CC-Link cable *1		
RAS function	 Automatic return function Offline test Error detection by link special relay/register 		
Applicable PLC	FX2N Series PLC		
Number of occupied I/O points	8 I/O points of FX Series PLC (8 points in total. The ratio between inputs and outputs is arbitrary.)		
Communication with PLC	By FROM/TO instructions via the buffer memory		
Note	 Scan method: Asynchronous mode Automatic refresh: Not provided Master station function: Not provided Standby master station function: Not provided 		
Operation indication	POWER : Lit while 24V DC is supplied from outside. L RUN : Lit while communication is normal. L ERR : Lit when communication error has occurred. SD : Lit while data is being transmitted. RD : Lit while data is being received.		
Program forwarding and monitoring	With AJ65BT-G4 and FX2N-232AWC-NP, sequence programs can be forwarded and monitored through CC-Link. Applicable software: GX Developer FX-PCS/WIN-E		
24V DC external power supply	Supplied from 24V DC (150 mA) external terminal blocks.		
5V DC internal power supply	5V DC power is converted from the input power. The 5V DC PLC bus is not used.		
Accessories	Program cable Lengths 1.0 m (3.2 ft) Special block number label		
MASS (Weight)	0.4 kg (0.88 lbs)		

*1 Dedicated CC-Link cables and dedicated high-performance CC-Link cables cannot be used at the same time. Only one type of cable can be used simultaneously. Attach a terminal resistor in accordance with the cable type.

3.3 Buffer Memory List

BFM n	umber	ltem	Description	
Hex. Dec.		ntem	Description	
#AH to #BH	#10 to #11	I/O signal	Refer to 3.4	
#1CH	#28	FROM/TO instruction access error judgement time	Set the FROM/TO instruction access error judgement time (unit:10ms).Default:200ms	
#1EH	#30	Model code	K7041	
#E0H to #15FH	#224 to #351	Remote input (RX)	Stores the input status from a remote station.	
#160H to #1DFH	#352 to #479	Remote output (RY)	Stores the output status from a remote station.	
#1E0H to #2DFH	#480 to #735	Remote register(RWw)	Stores the transmission data to a remote station.	
#2E0H to #3DFH	#736 to #991	Remote register(RWr)	Stores the received data from a remote station.	
#5E0H to #5FFH	#1504 to #1535	Link special relay (SB)	Stores the data link status.	
#600H to #7FFH	#1536 to #2047	Link special register (SW)	Stores the data link status.	

3.4 I/O Signals to PLC

PLC to local block Write (when TO instruction is used)					
BFM n	BFM number		Output signal name		
Hex. Dec.		Write bit	Output signal name		
	#10	b0	Refresh command		
#AH		b1 to b3	(Prohibited to use)		
#AN		b4	Request for module reset		
		b5 to b15	b5 to b15	(Prohibited to use)	
#BH	#11	b0 to b15	(Prohibited to use)		

	PLC to local block Read (when FROM instruction is used)					
BFM ı	number	Read bit	Input signal name			
Hex. Dec.		Read bit	input signal name			
		b0	Module error			
		b1	Data link status in host station			
		b2	(Prohibited to use)			
#AH	#10	b3	Data link status in other stations			
		b4	Module reset acceptance completion			
		b5 to b14	(Prohibited to use)			
		b15	Module ready			
#BH	#11	b0 to b15	(Prohibited to use)			

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: April 2001

MITSUBISHI ELECTRIC CORPORATION

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MITSUBISHI ELECTRIC

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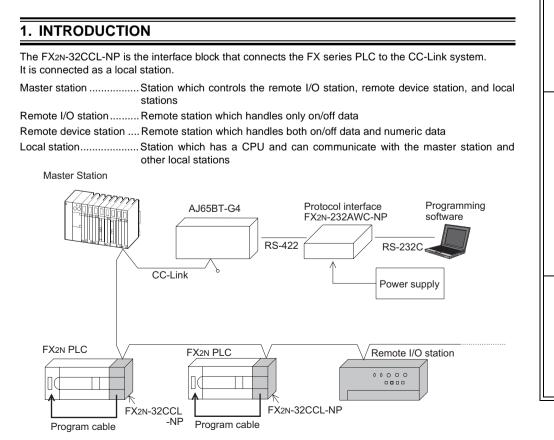
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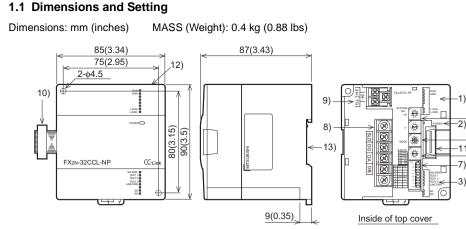
Hardware warnings

A

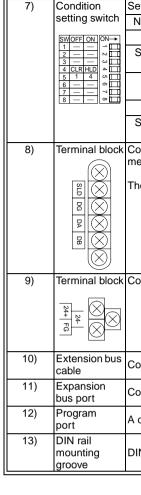
1) Indicates that the identified danger WILL cause physical and property damage.

2) Indicates that the identified danger could POSSIBLY cause physical and property damage.





lumber	Name			Description		
1)	LED	LED			LED :	status
,	indicators 1	name		Description	Normal	Error
			ON : Module is OFF: Watchdog	normal. I timer error has occurred.	ON	OFF
		ERR.	the stations set ON : Com occu Flashing : Com	mmunication status with in the parameters. munication error has rred in all stations. munication error has rred in some stations.	OFF	ON or flashing
		L RUN	ON: Data link (host stati	is being executed	ON	OFF
		L ERR.	occu Flashing : The to 7)	munication error has rred (host station). settings of the switches 4) are changed while the er is ON.	OFF	ON or flashing
2)	Power indictor	POWER	ON: 24V DC is	s supplied from the outside.	ON	OFF
3)	LED	SW ERR.	ON : Switch se	tting error has occurred.	OFF	ON
	indicators 2	TEST 1 TEST 2 TEST 3	Test result indic	ation	OFF except	t during test
	J SW ERR. TEST 1 TEST 2 TEST 3 LINE ERR. J SD	LINE ERR.		is broken the transmission ffected by noise, etc.	OFF	ON
		SD	ON: Data is be	eing transmitted.	ON	OFF
			ON : Data is being received.		ON	OFF
	number setting switch STATION NO. $\times 10$ $\times 10$ $\times 10$ 23 9 9 23 69 9 10 9 10 9 10 9 10 9 10		on : 1 to 64	set, the "SW" and "L ERR."	LED indicato	ors turn ON.
5)	Mode setting	Sets the op	peration status o	f the module. (Default settin	g at shipme	nt: 0)
	switch	Number	Name	Descrip		
		0	Online	Sets connection to data lin	k.	
		1	(Unusable)			
		2	Offline	Sets disconnection from da	ata link.	
		3	(Unusable)			
	MODE	4	(Unusable)	—		
	\$3456_188 9456_1888	5	(Unusable)	—		
	1000°	6	Hardware test			
		7	(Unusable)	Setting error (The SW LED		rns ON.)
		8 to A	(Unusable)	Used in PLC internal operation		<u> </u>
C)	Tronomicsion	B to F	(Unusable)	Setting error (The SW LED		
6)	and a state of the		ansmission spee	d of the module. (Default se	eaing at ship	ment: U)
	switch	Number		Setting contents		
	B RATE	0		156 kbps		
	0 156K			625 kbps		
	1 625K 2 2.5M	2		2.5 Mbps		
	3 5M 4 10M	3		5 Mbps		
		4 5 to 9	Setting error (T	10 Mbps ne SW and L ERR. LED ind	licatore turn	
	1	5109	Secury entry (1)	IN OW AND LENK. LED INC	แบลเบาร เนาก	UN.)



Number

Name

2. Installation and wiring

INSTALLATION PRECAUTIONS

- window of the PLC.

WIRING PRECAUTIONS

- /4 module
 - module.

 - kept to a minimum.

Description						
ets the operation condition. (Default setting at shipment: All OFF)						
Number	Setting description Switch status					
		ON	OFF			
SW1 to SW3	(Unusable)	Alway	s OFF			
SW4	Input data status in data link faulty station	Keep (HLD)	Clear (CLR)			
SW5	Number of occupied stations	4	1			
SW6 to SW8 (Unusable) Always OFF						
onnects dedicated CC-Link cables to enable data link. For the connection ethod, refer to Section 2.3.						

The terminals SLD and FG are connected inside.

Terminal block Connects the power supply to operate the master block.

Connects the PLC.

Connects an extension equipment.

A connector for program cable

DIN46277: DIN rail mounting groove of 35 mm (1.38") in width

Use the module in the environment described in the HARDWARE MANUAL General Specification. Do not use the PLC in a place with dust, soot, conductive dust, corrosive gas or combustible gas, place exposed to high temperature, condensation, wind or rain or place with vibration or impact. Using the module outside the range of the general specification may result in electrical shock, fire, malfunctions, or may damage the PLC.

· When drilling screw holes or performing wiring, make sure that cutting chips, wire chips or other foreign matter does not enter the ventilation window of the module.

Such matter may cause fire, failure or malfunction.

· When the installation work is completed, remove the dust protection sheet from the ventilation

If the sheet remains attached, it may cause fire, failure or malfunction

Securely connect extension cables to specified connectors.

Poor contact may cause malfunction.

Before beginning any installation or wiring work, make sure all phases of the power supply have been shut down from the outside

Incomplete shutdown of the power supply phases may cause electrical shock or damage in the

• Following an installation or wiring work, when turning on the power supply and operating the PLC, make sure that the terminal cover provided as an accessory has been attached to the

A missing cover may cause electrical shock.

• For the CC-Link system, use dedicated cables specified by the manufacturer.

The performance of the CC-Link system cannot be guaranteed with any cable other than the ones specified by the manufacturer.

With wiring outside the specification range, normal data transfer cannot be guaranteed.

· Make sure to fix communication cables and power cables connected to the module by placing them in the duct or clamping them.

Cables not placed in duct or not clamped may hang or shift, allowing them to be accidentally pulled, which may result in malfunction or damage to the module and the cables.

• The number of times to disconnect/connect the program cable for FX2N-32CCL-NP should be

• When disconnecting a communication/power cable connected to the module, do not hold the cable area.

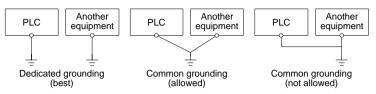
For a cable with connector, hold the connector attached to the module.

For a cable connected to a terminal block, loosen screws of the terminal block, then disconnect the cable.

If a cable is pulled while it is connected to a module, the module may malfunction or the module and the cable may be damaged.

WIRING PRECAUTIONS

Perform Class D grounding (solid grounding) with a wire of 2 mm² or more to the grounding terminal in the PLC main units. However, never perform common grounding with a high voltage system.



 Do not bundle control cables and communication cables with the main circuit and power cables. Keep control cables and communication cables at least 100 mm away from the main circuit and power cables.
 Otherwise, electric noise may cause a malfunction.

2.1 Installation

Install the FX2N-32CCL-NP on the right side of an FX2N Series main unit, extension unit, or other extension block.

The FX_{2N}-32CCL-NP can be installed using a DIN rail (DIN 46277, width: 35 mm (1.38 in.)) or directly with M4 (0.16 in.) screws.

In the case of direct installation, provide space of 1 to 2 mm (0.04 to 0.08 in.) between units.

2.2 Dedicated CC-Link Cable

Use dedicated CC-Link cables in the CC-Link system.

If any other cable is used, the performance of the CC-Link system cannot be guaranteed.

2.3 Module Wiring with Dedicated CC-Link Cables

This section describes the connection method of dedicated CC-Link cables.

- The cables can be connected without regard to the station number.
- Make sure to connect a terminal resistor (offered as an accessory of the module) between the DA and DB terminals in the modules at both ends.
- In the CC-Link system, the terminal resistor to be connected varies depending on the cable used.
- When a dedicated CC-Link cable is used: 110 Ω , 1/2 W (brown, brown and brown)
- When a dedicated high-performance CC-Link cable is used: 130 Ω, 1/2 W (brown, orange and brown)
- Star connection is not allowed.
- The figure below shows the connection method.

Important

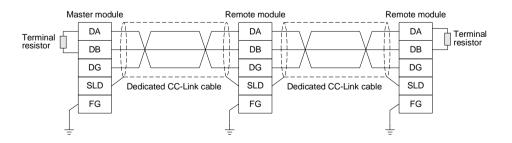
Make sure to use only one type of cable (dedicated CC-Link cables OR dedicated CC-Link highperformance cables).

If both types of cables are used together, normal data transmission cannot be guaranteed.

Point

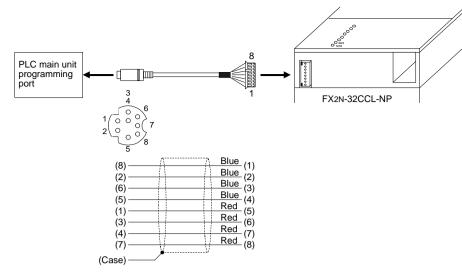
The shielded dedicated CC-Link cable should go through the terminals SLD and FG in each module, and both ends should be grounded (Class D = solid grounding). The terminals SLD and FG are connected inside the module.





2.4 Connection diagram of program cable

Length: 1 m (3.3 ft)



3. SPECIFICATION

3.1 General Specification

Dielectric strength: 500V AC for 1 minute (between the case and the PLC ground) Other specification is equivalent to that of the PLC main unit.

3.2 Performance Specification

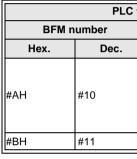
ltem	Specification			
Applicable function	Local station function (The master station and standby master station functions are not provided.)			
CC-Link version	Ver.1.10			
Transmission speed	Selectable (by rotary switch) among 156 kbps, 625 kbps, 2.5 Mbps, 5 Mbps and 10 Mbps			
Station number	1 to 64 (set by rotary switch)			
Maximum total cable length (maximum transmission distance)	1,200 m maximum Varies depending on the transmission speed.			
Number of link points per station	Remote I/O station : Remote I/O = 32/32 (RX/RY) points Remote device station : Remote I/O = 32/32 (RX/RY) points Remote register = 4 (RWw) points Remote register = 4 (RWr) points			
Transmission path type	Bus (RS-485)			
Connection cable	Dedicated CC-Link cable/Dedicated high-performance CC-Link cable *1			
RAS function	 Automatic return function Offline test Error detection by link special relay/register 			
Applicable PLC	FX2N Series PLC			
Number of occupied I/O points	8 I/O points of FX Series PLC (8 points in total. The ratio between inputs and outputs is arbitrary.)			
Communication with PLC	By FROM/TO instructions via the buffer memory			
Note	 Scan method: Asynchronous mode Automatic refresh: Not provided Master station function: Not provided Standby master station function: Not provided 			
Operation indication	POWER : Lit while 24V DC is supplied from outside. L RUN : Lit while communication is normal. L ERR : Lit when communication error has occurred. SD : Lit while data is being transmitted. RD : Lit while data is being received.			
Program forwarding and monitoring	With AJ65BT-G4 and FX2N-232AWC-NP, sequence programs can be forwarded and monitored through CC-Link. Applicable software: GX Developer FX-PCS/WIN-E			
24V DC external power supply	Supplied from 24V DC (150 mA) external terminal blocks.			
5V DC internal power supply	5V DC power is converted from the input power. The 5V DC PLC bus is not used.			
Accessories	Program cable Lengths 1.0 m (3.2 ft) Special block number label			
MASS (Weight)	0.4 kg (0.88 lbs)			

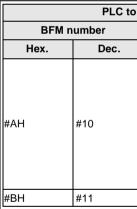
*1 Dedicated CC-Link cables and dedicated high-performance CC-Link cables cannot be used at the same time. Only one type of cable can be used simultaneously. Attach a terminal resistor in accordance with the cable type.

3.3 Buffer Memory List

BFM n	umber	ltem	Description	
Hex. Dec.		item	Description	
#AH to #BH	#10 to #11	I/O signal	Refer to 3.4	
#1CH	#28	FROM/TO instruction access error judgement time	Set the FROM/TO instruction access error judgement time (unit:10ms).Default:200ms	
#1EH	#30	Model code	K7041	
#E0H to #15FH	#224 to #351	Remote input (RX)	Stores the input status from a remote station.	
#160H to #1DFH	#352 to #479	Remote output (RY)	Stores the output status from a remote station.	
#1E0H to #2DFH	#480 to #735	Remote register(RWw)	Stores the transmission data to a remote station.	
#2E0H to #3DFH	#736 to #991	Remote register(RWr)	Stores the received data from a remote station.	
#5E0H to #5FFH	#1504 to #1535	Link special relay (SB)	Stores the data link status.	
#600H to #7FFH	#1536 to #2047	Link special register (SW)	Stores the data link status.	

3.4 I/O Signals to PLC







to	to local block Write (when TO instruction is used)					
	Write bit	Output signal name				
	b0	Refresh command				
	b1 to b3	(Prohibited to use)				
	b4	Request for module reset				
	b5 to b15	(Prohibited to use)				
	b0 to b15	(Prohibited to use)				

o lo	local block Read (when FROM instruction is used)				
	- Read bit Input signal name				
	b0	Module error			
	b1	Data link status in host station			
	b2	(Prohibited to use)			
	b3	Data link status in other stations			
	b4	Module reset acceptance completion			
	b5 to b14	(Prohibited to use)			
	b15	Module ready			
	b0 to b15	(Prohibited to use)			

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MITSUBISHI ELECTRIC CORPORATION

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