Pro-face



Device/PLC Connection Manuals



About the Device/PLC Connection Manuals

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

7.2 Mitsubishi Electric

7.2.1 System Structure

This section explains the system structure for the Ethernet connection between a PLC made by Mitsubishi Electric and the GP.

CPU Link I/F Cable Diagram Cables Unit GP/GLC Ē E Ethernet Unit A2A, A3A, A2N, AJ71E71 Ethernet cable Digital's GP Ethernet I/F A2U-S1 (conforming to Unit the IEEE802.3) (GP070-ET11/GP070--A2US A1SJ71E71 ET41) GP/GLC Series *1 GP77R Series Multi Unit E (GP077-MLTE11) GP-377R Series Multi Unit (GP377-MLTE11)

■ MELSEC-A Series/AJ71E71, A1SJ71E71 (using Ethernet Unit)

*1 Refer to the following table for compatible GP/GLC units and Ethernet connection information.

Sorios Namo		Droduct Namo	Optional	Built-in
		Product Name	Ethernet I/F Unit	Ethernet Port
GP70 Series	GP-470 Series	GP-470E	О	х
	GP-570 Series	GP-570S	О	х
		GP-570T	О	х
		GP-57JS	0	х
		GP-570VM	0	х
	GP-571 Series	GP-571T	0	х
	GP-675 Series	GP-675S	0	х
		GP-675T	О	х
	GP-870 Series	GP-870VM	О	х
GP77R Series	GP-377R Series	GP-377RT	O^{*1*2}	х
	GP-477R Series	GP-477RE	O ^{*2}	х
	GP-577R Series	GP-577RS	O ^{*2}	x
		GP-577RT	O ^{*2}	x
GP2000 Series	GP-2300 Series	GP-2300L	х	0
		GP-2300S	х	О
		GP-2300T	х	0
	GP-2400 Series	GP-2400T	х	0
	GP-2500 Series	GP-2500L	O ^{*3 *4}	О
		GP-2500S	O ^{*3*4}	О
		GP-2500T	O ^{*3*4}	О
	GP-2501 Series	GP-2501L	O ^{*2*3}	x
		GP-2501S	O ^{*2*3}	х
		GP-2501T	O ^{*2*3}	x
	GP-2600 Series	GP-2600T	O ^{*3*4}	О
	GP-2601 Series	GP-2601T	O ^{*2*3}	x
GLC 2000 Series	GLC-2300 Series	GLC-2300L	х	0
		GLC-2300T	х	0
	GLC-2400 Series	GLC-2400T	x	0
	GLC-2500 Series	GLC-2500T	\mathbf{O}^{*3*4}	0
	GLC-2600 Series	GLC-2600T	O ^{*3*4}	0
ST Seires		ST403	x	0

*1 Only the Multi unit can be used.

*2 The 2-Way Driver (Pro-server, GP-Web and others) cannot be used.

- *3 When using the optional Ethernet I/F unit, a bus conversion unit (PSL-CONV00) is required.
- *4 Using the optional Ethernet I/F Unit allows you to set up separate Class and Net No.s for 2-Way Driver applications (Pro-Server, GP-Web and others) and the PLC. When doing this, data transfer with the PLC is performed through the optional Ethernet I/F Unit.



• For cable connections, refer to the user's manual for each optional unit. For the GP2000 and GLC2000 series, however, refer to the user's manual for the main unit.

MELSEC-Q Series

CPU	Linkl/F	Cable Diagram	Cables	Unit	GP/GLC
	Ethernet Unit	<			
Q00CPU	QJ71E71		Ethernet cable	Digital's GP	
Q01CPU	QJ71E71-B2		(conforming to	Ethernet I/F Unit	
Q00JCPU	QJ71E71-100		the IEEE802.3)	GP070-ET11	
Q02CPU				GP070-ET41	
Q02HCPU				GP377-MLTE11	GP/GLC Series
Q06HCPU				GP377-MLTE41	
Q12HCPU				GP077-MLTE41	
Q25HCPU					

*1 Refer to the following table for compatible GP/GLC units and Ethernet connection information.

Series Name		Droduct Namo	Optional	Built-in
		FIGURE	Ethernet I/F Unit	Ethernet Port
GP77R Series	GP-377R Series	GP-377RT	O ^{*1 *2}	x
	GP-477R Series	GP-477RE	O ^{*2}	x
	GP-577R Series	GP-577RS	O ^{*2}	x
		GP-577RT	O ^{*2}	х
GP2000 Series	GP-2300 Series	GP-2300L	х	0
		GP-2300S	х	О
		GP-2300T	х	О
	GP-2400 Series	GP-2400T	х	0
	GP-2500 Series	GP-2500L	O ^{*3*4}	О
		GP-2500S	O ^{*3*4}	О
		GP-2500T	O ^{*3*4}	0
	GP-2501 Series	GP-2501L	O ^{*2*3}	х
		GP-2501S	O ^{*2*3}	x
		GP-2501T	O ^{*2*3}	х
	GP-2600 Series	GP-2600T	O ^{*3*4}	О
	GP-2601 Series	GP-2601T	O ^{*2*3}	х
GLC 2000 Series	GLC-2300 Series	GLC-2300L	х	О
		GLC-2300T	х	0
	GLC-2400 Series	GLC-2400T	х	О
	GLC-2500 Series	GLC-2500T	O ^{*3*4}	О
	GLC-2600 Series	GLC-2600T	O ^{*3*4}	О
ST Series		ST403	х	О

- *1 Only Multi unit can be used.
- *2 The 2-Way Driver (Pro-Server, GP-Web and others) cannot be used.
- *3 When using optional Ethernet I/F unit, a bus conversion unit (PSL-CONV00) is required.
- *4 Using the optional Ethernet I/F Unit allows you to set up separate Class and Net No.s for 2-Way Driver applications (Pro-Server, GP-Web and others) and the PLC. When doing this, data transfer with the PLC is performed through the optional Ethernet I/F Unit.



• For cable connections, refer to the user's manual for each optional unit. For the GP2000 and GLC2000 series, however, refer to the user's manual for the main unit.



- *1 When transmitting data via the PLC's OPEN Setting feature instead of the Auto OPEN UDP Port feature, up to 16 GP units can be connected. Also, when using the PLC's Auto Open UDP Port feature, there is no limitationfor for the number of GP units that can be connected.
- *2 When using a 10BASE-5 or a 10BASE-2 cable with the Mitsubishi PLC, use a transceiver to connect this cable with the 10BASE-T cable.

MELSEC-QnA Series

CPU	Link I/F	Cable Diagram	Cables	Unit	GP/GLC
	Ethernet Unit	4			
Q2A	AJ71QE71		Ethernet cable	Digital's GP	
Q2A-S1	AJ71QE71-B5		(conforming to	Ethernet I/F Unit	
Q3A			the IEEE802.3)	GP070-ET11	
Q4A				GP070-ET41	
Q4AR				GP377-MLTE11	GP/GLC Series ^{*1}
Q2AS	A1SJ71QE71-B2			GP377-MLTE41	
Q2AS-S1	A1SJ71QE71-B5			GP077-MLTE41	
Q2ASH					
Q2ASH-S1					

*1 Refer to the following table for compatible GP/GLC units and Ethernet connection information.

Series Name		Droduct Nomo	Optional	Built-in
		Product Name	Ethernet I/F Unit	Ethernet Port
GP77R Series	GP-377R Series	GP-377RT	O ^{*1*2}	х
	GP-477R Series	GP-477RE	O ^{*2}	x
	GP-577R Series	GP-577RS	O ^{*2}	х
		GP-577RT	O ^{*2}	х
GP2000 Series	GP-2300 Series	GP-2300L	x	О
		GP-2300S	х	О
		GP-2300T	х	О
	GP-2400 Series	GP-2400T	х	О
	GP-2500 Series	GP-2500L	O ^{*3*4}	О
		GP-2500S	O ^{*3*4}	О
		GP-2500T	O ^{*3*4}	О
	GP-2501 Series	GP-2501L	O ^{*2*3}	х
		GP-2501S	O ^{*2*3}	х
		GP-2501T	O ^{*2*3}	х
	GP-2600 Series	GP-2600T	O ^{*3*4}	О
	GP-2601 Series	GP-2601T	O ^{*2*3}	х
GLC 2000 Series	GLC-2300 Series	GLC-2300L	х	О
		GLC-2300T	х	О
	GLC-2400 Series	GLC-2400T	х	О
	GLC -2500 Series	GLC-2500T	O ^{*3*4}	0
	GLC-2600 Series	GLC-2600T	O ^{*3*4}	О
ST Series		ST403	х	0

*1 Only Multi unit can be used.

- *2 The 2-Way Driver (Pro-Server, GP-Web and others) cannot be used.
- *3 When using optional Ethernet I/F unit, a bus conversion unit (PSL-CONV00) is required.
- *4 Using the optional Ethernet I/F Unit allows you to set up separate Class and Net No.s for 2-Way Driver applications (Pro-Server, GP-Web and others) and the PLC. When doing this, data transfer with the PLC is performed through the optional Ethernet I/F Unit.



• For cable connections, refer to the user's manual for each optional unit. For the GP2000 and GLC2000 series, however, refer to the user's manual for the main unit.



- *1 When transmitting data via the PLC's OPEN Setting feature instead of the Auto OPEN UDP Port feature, up to 8 GP units can be connected. Also, when using the PLC's Auto Open UDP Port feature, there is no limitationfor for the number of GP units that can be connected.
- *2 When using a 10BASE-5 or a 10BASE-2 cable with the Mitsubishi PLC, use a transceiver to connect this cable with the 10BASE-T cable.

7.2.2 Supported Devices

The following describes the range of devices supported by the GP.

■ MELSEC-A Series

Setup System Area here.

Device	Bit Address	Word Address	Particulars	
Input Relay	X0000 ~ X1FFF	X0000 ~ X07F0	[<u>xxx</u> 0]	
Output Relay	Y0000 ~ Y1FFF	Y0000 ~ Y07F0	<u>[xxx</u> 0]	1
Internal Relay	M0000 ~ M8191	M0000 ~ M8176	(÷16)	Ì
Latch Relay	L0000 ~ L8191			Ì
Special Relay	M9000 ~ M9255	M9000 ~ M9240	(÷16)	Ì
Annunciator	F0000 ~ F2047	F0000 ~ F2032	(÷16)	
Link Relay	B0000 ~ B0FFF			Ì
Timer (contact)	TS0000 ~ TS2047			Ì
Timer (coil)	TC0000 ~ TC2047			L/H
Counter (contact)	CS0000 ~ CS1023			
Counter (coil)	CC0000 ~ CC1023			Ì
Timer (current value)		TN0000 ~ TN2047		
Counter (current value)		CN0000 ~ CN1023		
Data Register		D0000 ~ D6143	Bit] 5]	1
Special Register		D9000 ~ D9255	Bit] 5]	1
Link Register		W0000 ~ W0FFF	Bit F	Ì
File Register		R0000 ~ R8191	Bit] 5]	



Note: The range of supported devices may differ depending on your CPU. For the range of supported devices for each CPU, refer to the User's Manual for Model AJ71E71 Interface Unit by Mitsubishi Electric.

MELSEC-Q/MELSEC-QnA Series				
	_		Setu	
	Device	Bit Address	Word Address	

Setup System Area here.

Device	Bit Address	Word Address	Particulars	5
Input Relay	X0000 ~ X1FFF	X0000 ~ X1FF0	<u>xxx</u> 01	
Output Relay	Y0000 ~ Y1FFF	Y0000 ~ Y1FF0	<u>xxx</u> 01	
Internal Relay	M0000 ~ M32767	M0000 ~ M32752	÷16	
Special Relay	SM0000 ~ SM2047	SM0000 ~ SM2032	[÷]6]	
Latch Relay	L0000 ~ L32767	L0000 ~ L32752	[÷]6]	
Annunciator	F0000 ~ F32767	F0000 ~ F32767	<u>÷16</u>	
Edge Relay	V0000 ~ V32767	V0000 ~ V32752	<u> </u>	
Step Relay	S0000 ~ S8191	S0000 ~ S8176	: <u>16</u>	
Link Relay	B0000 ~ B7FFF	B0000 ~ B7FF0	[<u>xxx</u> 0]	
Special Link Relay	SB000 ~ SB7FF	SB000 ~ SB7F0	<u>xxx</u> 01	
Timer (contact)	TS00000 ~ TS23087			
Timer (Coil)	TC00000 ~ TC23087			
Aggregate Timer (contact)	SS00000 ~ SS23087			
Aggregate Timer (coil)	SC00000 ~ SC23087			
Counter (contact)	CS00000 ~ CS23087			L/H
Counter (coil)	CC00000 ~ CC23087			
Timer (current value)		TN00000 ~ TN23087		
Aggregate Timer (current value)		SN00000 ~ SN23087		
Counter (current value)		CN00000 ~ CN23087		
Data Register		D00000 ~ D25983	Bit] 5]	
Special Register		SD0000 ~ SD2047	Bit] 5]	
Link Register		W0000 ~ W657F	BitF	
Special Link Register		SW000 ~ SW7FF	BitF	
File Register (Normal)		R0000 ~ R32767	Bit] 5]	
		0R0000 ~ 0R7FFF	BitF	
		1R0000 ~ 1R7FFF	Bit F	
File Register (Serial)	:	:	:	
		30R0000 ~ 30R7FFF	BitF	
		31R0000 ~ 31R67FF	Bit F	



- Note: The device ranges given here show the maximum range available for each narameter setting.
 - When using File Regsters, depending on the type of unit used, a PLC Memory Card may be required. Depending on the size of the Memory Card, the device ranges will change. For details, refer to Mitsubishi Electric Co., Ltd's User's Manual.
 - When using the QnA series unit's File Registers, depending on the QnA unit's CPU version, certain usage restrictions will apply. For details, refer to Mitsubishi Electric Co., Ltd.'s User's Manual for QnA Series.



GP Settings

The communications settings for the GP, which are required for communications via the Ethernet, as shown below:

SET UP OPERATION SURROUNDINGS Menu



♦ SET UP ETHERNET INFORMATION

Select "SET UP ETHERNET INFORMATION," and then enter the necessary information for each item.

SETUP ETHERNET INFORMATION	N			SET	CANCEL
SRC IP ADDRESS	[].[].[].[]
SRC PORT NO.	[]			
DEST IP ADDRESS	[].[].[].[]
DEST PORT NO.	[]			
PROTOCOL TYPE	UE	P	TCP		
	-4	-11			
1 2 3 4 5	5 6	7 8	90		BS
					$\leftarrow \rightarrow$

• SRC IP ADDRESS

Enter the IP address for the GP at your station. To do this, separate the 32 bits of the IP address into four segments of eight bits each, delimit those segments with a dot, and then enter them as decimal numbers.

• SRC PORT NO.

Enter your station port number in the range from 1024 to 65535. (1025 to 65534, for MELSEC QnA and Q Series units)

• DEST IP ADDRESS

Enter the IP address of the other station (the MELSEC).

• DEST PORT NO.

Enter the port number of the other station in the range from 1024 to 65535. (1025 to 65534, for MELSEC QnA and Q Series units)

• **PROTOCOL TYPE**

You can select either UDP or TCP communication. If the power will be turned ON/ OFF synchronously, it is recommended that you use UDP communications.



For the IP addresses, check with the network manager. Do not specify any duplicate IP address.



When using the built-in Ethernet port on a GP2000 or GLC2000 series unit, be sure not to set any duplicate "SRC PORT No." values.

Check the 2-way driver's "SRC PORT No." setting via the following menu:

GP OFFLINE mode's Main menu [INITIALIZE] -> [SETUP OPERA-TION SURROUNDINGS] -> [EXTENDED SETTINGS] -> [SETUP ETHERNET INFORMATION].

The default value is 8000. The 2-way driver uses this port and the following 9 ports (8000 ~ 8009). Be sure not to use Port No.s 5001 and 5002, since they are used by the PLC's Ethernet Unit.

♦ SET UP NETWORK EXT. INFORMATION

SETUP NETWORK EXT. INFORMATION			SET	CANO). EL
SEND WAIT TIME	Γ] (ms)			
TIMEOUT	Γ] (x 2sec)			
IP ROUTER ADDRESS	[].[].[].[]
SUBNET MASK	[].[].[].[]
UDP RETRY COUNT(0-255)	[]			
		-111		1-1	1
	7 8	9 0			BS
				<u> </u> (←) (→	

• SEND WAIT TIME (0 to 255)

Wait time can be added when a command is transmitted from the GP. Use the wait time if the traffic on the communications line is heavy. If no wait time is required, enter "0."

• TIMEOUT (0 to 65535)

Enter the desired timeout value. If no response is received from the other station within the specified time, a timeout occurs. If "0" is specified, the default time is 15 seconds when it is TCP communication, and is 5 seconds when it is UDP communication.

• IP ROUTE ADDRESS

Enter the IP address of the router (only one). If no router is used, enter "0" in all fields.

• SUBNET MASK

Enter subnet masks. If no subnet mask is used, enter "0" in all fields.

• UDP RETRY COUNT (0 to 255)

Designates the number of times the GP re-sends a command when there is no reply from the other port and a timeout occurs. When no reply is received after the re-try setting number is reached, an error message will appear on the GP screen.



If the memory is initialized in the OFFLINE mode, random values may be included. Be sure to check the displayed values.

SET UP OPERATION SURROUNDINGS	SET	CANCEL
STARTING ADDRESS OF SYSTEM DATA AREA	[]
SYSTEM AREA READING AREA SIZE (0-256)	[]	
DATA CODE	BINARY	ASCII
RESET GP DATA WRITE ERROR	ON	OFF
		T T I BS
1D 2D 3D 4D 1B 2B 3B 4B		

♦ SET UP OPERATION SURROUNDINGS

• DATA CODE (Set only when connecting to a MELSEC-Q Series and MELSEC-QnA Series)

This selection controls the type of DATA CODE settings used. Select either BI-NARY or ASCII, and confirm that the PLC settings are the same.

Sample Ladder Program

◆ MELSEC-A Series (Ethernet interface unit: AJ71E71)

PLC's Ladder Program is needed to communicate with the GP.

Reference 👗

For the complete details of settings, refer to the user's manual for Model AJ71E71 Ethernet Interface Unit (Mitsubishi Electric).

The follwing is a sample ladder.

<Sample Ladder>

LD	M9038			
DMOVP	Hxxxxx	xxx		D100 (IP address of PLC) *1
MOVP	K0		D102	
MOV	H0100		D116	(Settings for UDP communications)
MOV	K1024		D124	(Port number of PLC)
MOV	K1024		D127	(Port number of GP)
DMOV	Hxxxxx	xxx	D125	(IP address of GP) ^{*1}
DMOV	HFFFF	FFF	F	D128
MOV	HFFFF		D130	
LD	M9036			
TOP	H0000	H0	000	D100 K50
LD	X0019			
MOV	K5	D1	13	
TOP	H0000	K1	3	D113 K1
LD	M9036			
OUT	Y0019			
LD	M9036			
OUT	Y0008			
END				

*1 For the IP addresses, check with the network manager. "xxxxxxx" stands for an IP address in the hexadecimal notation. Do not specify any duplicate addresses.



Be sure that any addresses (D...) used in the communications settings for the PLC are not the same as the first address of the system on the GP.

♦ MELSEC-Q Series

Prior to GP starting GP communciation, the MNET/10H Ethernet settings must be set in the PLC's ladder logic software. The setting values are as shown below.

- 1. Network Parameter MNET/10H Ethernet Settings
- 2. Ethernet Operation Settings
- 3. OPEN Settings

1. Network Parameter MNET/10H Ethernet Settings

Items	PLC Settings
Network Classification	Ethernet
First I/O No.	Any number ^{*1}
Network No.	Any number ^{*1}
Group No.	Any number ^{*1}
Machine No.	Any number ^{*1}
Mode	Online

*1 This setting does not effect PLC/GP communication.

2. Ethernet Operation Settings Recommended Settings Items PLC Settings Remarks Data Cade Settings Should be same as Should be same as

Data Code Settings	BINARY Code	ASCII Code	GP unit's data Code Settings.
Initial Timing Settings	Not waiting for OPEN	Always waiting for OPEN	
IP Address Settings	Any		
Write Possible in RUN mode	Not allowed	Allowed *2	
Send Frame Settings	Ether		
TCP Confirming Settings *3	KeepAlive	Ping	Both can be used.

*1 Please contact your computer network supervisor to confirm your setting data.

*2 When performing Write from a GP in RUN mode, set the Write Possible in RUN mode to "Allowed".

*3 This setting does not effect PLC/GP communication.

3. OPEN Settings

Items	PLC Settings			Remarks	
Protocol				סו/סר	Should be same as GP unit's
1100001			0		Communcation Format Settings.
ODEN Format *1	Active Fullpassive	Fullnassivo	Unnassivo	MELSOFT	Either Fullpassive or Unpassive
OPEN FOIMAL		Fullpassive	Ullpassive	connection	can be used.
SPC Port No	Any number ^{*2}			Should be same as GP unit's	
SICTORINO.				DEST Port No.	
DEST ID Address	Any number ^{*2*3}			Should be same as GP unit's	
DEST II Audress				SRC IP Address.	
DEST Port Address	Any number ^{*2*3}			Should be same as GP unit's	
DEST FOR Address				SRC Port No	
Fixed Buffer	Transmission		Sub	scription	Independent of GP.
Fixed Buffer Method	Yes				
Paring Open	Yes			No	Independent of GP.
Confirming	No			Yes	Both can be used.

*1 Can be used only when Protocol is set to TCP/IP (Hexadecimal).

*2 Please contact your computer network supervisor to confirm your setting data.

*3 If OPEN Format is set to "Unpassive", this item does not need to be set

When the Auto Open UDP Port feature is used, the Table 3. OPEN Settings are not needed. When these settings are used, however, the PLC's port number is 5000 (default setting).

Reference For details, refer to Mitsubishi Electric's Q and QnA Series Ethernet Interface User Manuals.

MELSEC-QnA Series

PLC's Ethernet Unit Dipswitch Settings and a Ladder Program are needed to communicate with the GP.

Ethernet Unit Settings

Operation Mode Setting Switch

Contents	Settings	
Operation Mode Settings	0:Online	

Recommended Settings				
Switch	Contents	Settings		
SW1	Action performed when TCP/IP Timeout occurs	OFF:When TCP/IP Timeout Error occurs, the line is closed.	ON:When TCP/IP Timeout Error occurs, the line is not closed.	
SW2	Data Code Settings	OFF:BINARY Code	ON:ASCII Code	
SW3	Auto Start Settings	OFF:Perform action(s) defined in Y19.	ON:Regardless of Y19, after unit is turned ON again or is Reset, Initialization is performed.	
SW4~SW6	Cannot use (fixed to OFF)			
SW7	CPU Communication Timing Settings ^{*1}	OFF:Write in RUN mode is Impossible.	ON:Write in RUN mode is Possible.	
SW8	Initial Timing Settings	OFF:Quick Start (start without time delay)	ON:Normal Start (Start after 20 seconds time delay)	

Communication Condition Setting Switch

*1 When performing Write From GP in RUN mode, set the CPU Comunication Timing Settings to ON.

Sample Ladder Program

This Sample Ladder Program is for communication via the Auto Open UDP Port No. (default:5000).

• PLC IP Address: 192.168.0.1

• PLC Port No.: 5000

When communicating via this function, the GP's IP Address and Port No. do not need to be set.



Reference

The sample ladder above is the minimum ladder to communicate with GP via UDP/IP. For details about error processing and TCP/IP communication, refer to Mitsubishi Electric Co., Ltd.'s User's manual for QnA Series Ethernet Interface Unit (Detail manual).



Reference About the GP Ethernet Speicific Error Codes, refer to the "Protocol Stack Error Codes".

■PLC SPECIFIC ERROR CODES

PLC error codes are displayed by the "Host Communication Error (02:**:**)", and indicated in the left lower corner of the GP screen. (**:**indicates the PLC's specific error codes)

Error Code Description		Status
0055	Write error in RUN mode	Write in RUN mode is set to OFF.
4031	CPU Device Settings Error	Designated device is outside allowable range.



Reference For more details about error codes, refer to Mitsubishi Electric Co., Ltd.'s User's Manuals for Q Series Ethernet Interface Unit and QnA Series Ethernet Interface Unit.

7.9 Protocol Stack Error Codes

Protocol Stack Error Codes are displayed on the GP as follows.

Host communication error (02:FE:**)

** represents one of the following error codes, from 00 to F0.

Error Code	Description		
00	There is a setup error related to the IP address of your station at initialization.		
05	Initialization has failed.		
06	Cancelling of communications has failed.		
07	An attempt was made to establish a connection before initialization was successfully completed.		
08	Your station's port number is incorrect		
09	The destination station's port number is incorrect.		
0A	The IP address of the other station is incorrectl.		
0B	The same port number is already being used by UDP for establishing the connection.		
0C	The same port number is already being used by TCP for establishing the connection.		
0D	Protocol stack has refused connection establishment.		
0E	Protocol stack has returned the unsuccessful establishment of a connection.		
0F	The connection has been shut down.		
10	All connections are busy. No connection is available.		
13	Your station was aborted by a different station.		
30	There was no reply from the protocol stack.		
32	There was no reply from the other station.	*1 *2	
40	No network infofmation exists for the designated node.	*1	
41	I/O memory type of the random read-out response data is incorrect.	*1	
42	Network information does not exist.		
F0	Undefined error.		

*1 When using an OMRON Corporation CS1/CJ/CJ1M Series unit, the error code will appear on the GP screen as shown below. Also, behind the Ethernet error code will appear the designated Network and Node addresses.

Host Communication Error (02:FE:**:###:###)



Node Address (Decimal) Network Address (Decimal) Ethernet Error Code (Hex)

*2 When using a Hitachi Industrial Equipment Corporation's HIDIC H Series or a Schneider Corporation MODBUS TCP unit, the error code will appear on the GP screen as shown below. Also, behind the Ethernet error code will appear the designated Node address.

Host Communication Error (02:FE:**:###:###)

Node Address (Decimal) Ethernet Error Code (Hex)