

Mitsubishi <11> Mitsubishi Electric Corporation

Q Series (Q Mode) + Link Unit Connection

Selecting PLC Type

Start up GP-PRO /PBIII.

Select the following PLC Type when creating the project file.



Communication Settings Sample



GP S	Setup	Serial Communication Unit Settings ^{*1}			
Baud Rate	19200bps	Baud Rate 19200 bps			
Data Length	7 bits	Data Bit 7 bits			
Stop Bit	2 bits	Stop Bit 2 bits			
Parity Bit	Even	Parity Check Yes Parity setting even/odd Even			
Data Flow Control	ER Control				
Communication Format (RS- 232C)	RS-232C	Mode Setup (RS-232C) 4 (Format 4 Proto Mode)			
Communication Format (RS- 422)	4-wire type	Mode Setup (RS-422) 4 (Format 4 Protocol Mode)			
		Sum Check	Yes		
Unit No.	0	Station Number	0		

*1 The setting is made by Mitsubishi's GPP function software.

Communication Settings [GP]

1 [GP-PRO/PB C-Package Setting]

Select [GP Setup] on Project Manager.

1) Communication Settings	1) Communication Settings
GP Settings I/O Settings Mode Settings Initial Screen Settings Extended Settings Communication Settings RS-220C / RS-422 Transmission Speed 19200 V RS-220C / RS-422 Transmission Speed 19200 V RS-220C / RS-422 Transmission Speed 19200 V Data Length Parky BR Stop BR 0 dat Length Parky BR Stop BR 0 dat Length Parky BR Stop BR 0 dat Length Parky BR Vone 0 dat Length Parky BR Stop BR 0 dat Length Parky BR Stop BR 0 dat Length Parky BR Stop BR 0 dat Control Parky BR 0 DTR / ER Advanced 0 K Cancel Detauts	Transmission Speed : 19200bps Data Length : 7 Bits Stop Bit : 2 Bit Parity Bit : Even Busy Ready Control : DTR / ER RS-232C/ RS-422 RS-232C Connection : RS-232C RS-422 Connection : 4 Line * Select one in depending on the communication method.



2) Mode Settings	2) Mode Settings
Communication Settings Initial Screen Settings Mode Settings Mode Settings Mode Settings MITSUBISHI MELSEC-QnA(LINK) System Start Address D00000 Machine Number Imit Init Contention Settings Node Setup Node Setup Imit Node Setup Imit International Status Imit Ott Cancel Defaults Ott	System Start Address: Arbitrary Address Machine Number: 0 Link Protocol Type: 1:1



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Send Information	Communications Port
	© <u>c</u> om
Filing Data[CF card]	Comm Port COM1 Retry Count 5
Data Trans Func CSV Data(CF card)	Baud Rate 115.2K 💽 (bps)
	O <u>E</u> thernet
Transfer Method Send All Screens	IP Address 0. 0. 0. 0 Port 8000
Automatically Send <u>Changed Screens</u> Send User Selected Screens	C Ethernet: Auto Acquistion
	C Memory Loader
C Automatic Setup Use E C Eorce System Setup C Do NOT Perform Setup Setup CFG file : C English C Japanese C Selection C:\Program Files\pro-face\ProPBW	Extended Program : Simulation System Screen
OK	Cancel Help

Transfer to GP after settings completed.



2 [GP Settings]

1) Checking GP Type	1) Checking GP Type
*03/00/00 00:00 1 INITIALIZE 2 SCREEN DATA TRANSFER 3 SELF-DIADADSIS 4 RUN	If you have selected Mitsubishi MELSEC-QnA (Link), the following will be shown. "MELSEC-QnA"
2) Communication Sottings	2) Communication Settings
2) Communication Settings	$[MAIN MENU] \downarrow [INITIALIZE] \downarrow [SET UP I/O] ↓ [SET UP SIO]$
SET UP SI0 SET CANCEL COMMUNICATION RATE 2400 4800 9600 19200 38400 57600 115200 DATA LENGTH 7 8 5 57600 115200 115200 DATA LENGTH 7 8 5 7 8 5 115200 115200 DATA LENGTH 7 8 7 8 115200 115200 115200 DATA LENGTH 7 8 7 8 11 2 4 110 110 OOMMUNICATION FORM R5232C 4 LINE 1 2 3 4 5 6 7 8 0 1 4 65 1 2 3 4 5 6 7 8 0 1 4 65	Communication Rate: 19200bps Data Length: 7 Bits Stop Bit: 2 Bits Parity: Even Control: ER Cntrl Communication Format RS-232C Connection: RS-232C RS-422 Connection: 4 Line * Select one in depending on the communication method.



3) Setting up Operation Surroundings	3) Setting up Operation Surroundings
	[MAIN MENU] ↓ [INITIALIZE]
SET UP L/D PLC SETUP INITIALIZE MEMORY 5 SET UP TIME 6 SET UP SOREEN	[PLC SETUP] ↓ [PLC SETUP]
SET UP OPERATION SURROUNDINGS MENU 1:1 n:1 1:1 set up operation surroundings	SET UP OPERATION SURROUNDINGS MENU: 1: 1
SET UP OPERATION SURROUNDINGS	Starting Address of System Data Area: Arbitrary Address
STARTING ADDRESS OF SYSTEM DATA AREA [000000] UNIT NO. [0] SYSTEM AREA READING AREA SIZE (0-256) [0] RESET GP ON DATA WRITE ERROR ON OFF	Unit No . : 0



Communication Settings [PLC]

1 [RS-232C / RS-422 Connection]

to execute.

Start up the ladder tool "GX Developer". Double-click [PC Parameter] under [Parameter]



A dialog box below opens.

0	1						
Qn(H) Parameter							
PLC name PLC sys	tem PLC file	PLC RAS	Device	Program	Boot file	SF	I/O assignment

Select the [I/O assignment] tab.

Qn(H) Parame	eter					2
PLC name	PLC system PLC) ment(*)	⊃ file [PLO RAS [I	Device Program	Boot file	SFC I/O	assignment
Slo	ot Type	Model nam	e Points	: StartXY	-	Switch cotting
0 PLU 1 0(*-0) 2 1(*-1)	Intelli.	• QJ71C24	32points	• 0000		Detailed setting
3 2(*-2)		•		• •		
5 4(*-4) 6 5(*-5)		• •		• •		(2)
7 Lerx ct Assignin	e the L/O address this setting blank	s is not necessary a will not cause an e	es the CPU does	it automatica	ц.	
Base settin	ig (*)					
	Base model name	Power model name	Extension cable	Slots		Base mode
Main Ext.Base1				- -	Dofor	C Detail
Ext.Base2 Ext.Base3				•		8 Slot Default
Ext.Base4 Ext.Base5				▼		12 Slot Default
(*)Setting using	s should be set a multiple CPU.	as same when	Import Mult	tiple CPU Par	ameter	Read PLC data
Acknowledg	ge XY assignment	Multiple CPU	settings Defa	ault Cł	neck	End Cancel

(1) Click [Type] to select [Intelli.]

* By clicking the [Read PLC data] button, the type(s) and points of the unit(s) inserted currently into the base unit can be read automatically.

(The PC needs to be connected to the CPU via ladder cable.)



(2) Click [Switch setting].

Swit	witch setting for I/O and intelligent function module								ĸ		
						Inpu	t format	HEX			
	Slot	Туре	Model name	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5			
0	PLC	PLC									
1	0(*-0)	Intelli.	QJ71C24								
2	1(*-1)										
3	2(*-2)										
4	3(*-3)										
5	4(*-4)										
6	5(*-5)										
7	6(*-6)										
8	7(*-7)										
9	8(*-8)										
10	9(*-9)										
11	10(*-10)										
12	11(*-11)										
13	12(*-12)										
14	13(*-13)										
15	14(*-14)								-		
	End Cancel										

A dialog box above opens. Set [Switch setting] as below.

Settings Switch1 and Switch2 are for the RS-232C interface on CH1. Settings Switch3 and Switch4 are for the RS-422/485 interface on CH2. Settings Switch5 are for the machine number on both CH1 and CH2.

In this sample here, a sample setting only for CH1 is introduced, but set CH2 in a same way as CH1.

	Slot	Туре	Model name	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5
0	PLC	PLC						
1	0(*-0)	Intelli.	QJ71C24	07FC	0004			0000
2	1(*-1)							



Please see the setting description as below.

Switch No.	Set Value	Setting Description						
Switch 1	07FC	07> Transmission Speed 19,200bps						
		Bit Settings Item / Content						
		Bit0	Bit0 OFF Operation Setti					
				Independent				
		Bit1	OFF	Data Bit / 7 bits				
		Bit2	ON	Parity Bit / Yes				
		Bit3 ON Even/Odd Parity / Even						
		Bit4 ON Stop Bit / 2 bits						
		Bit5 ON Sum Check Code / Yes						
		Bit6 ON Write during RUN / Enab						
		Bit7 ON Change Setting / En						
Switch 2	0004	Commur	nication Proto	ocol Setting>				
		MC Prot	ocol Type 4					
Switch 3		Same as Switch 1						
Switch 4		Same as Switch 2						
Switch 5	0000	Machine Number : 0						
Note: Wh	en communicating	CH1 and C	CH2 at the sa	me time, set 115200 bps for the				
total	of the transmission	speed of b	ooth interface	es.				

After completing the above settings, click [End].

The [Switch Setting] dialog box returns to the [Parameter Setting] dialog box. Click [End] again.

3) Select [Offline]-->[Write to PLC] to open the [Write to PLC] dialog box.

Check [PC/Network] under [Parameter]. Click [Execute] to start downloading the parameter file to the PLC.

After downloading completed, power off and on the PLC to restart up.