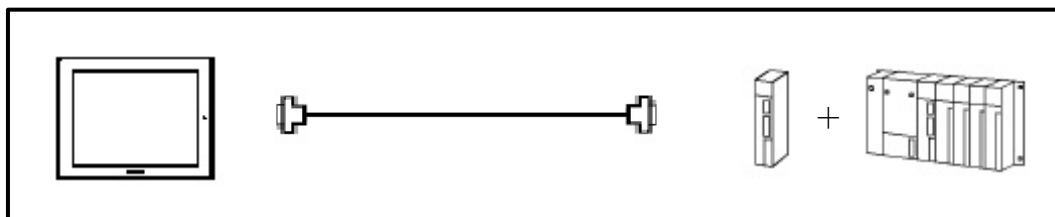


Mitsubishi<5> Mitsubishi Electric PLC

「A Series (AnS,AnSH,A0J2) + LINK unit (Middle-sized)」 Connection method

System Structure



Object Model

Model 	Series	Notes
GP	GP70 Series GP77/77R Series GP2000 Series	Except of handy-type
GLC	GLC2000 Series	

Object P L C

CPU 	Calculator link unit 	Connection Method	Connection cable 	GP 
AOJ2,A0J2H	AOJ2-C214-S1	RS-422	Connection Method 【 2 】	
A1S	A1SJ71C24-R2 A1SJ71UC24-R2	RS-232C	Connection Method 【 1 】	
	A1SJ71C24-R4	RS-422	Connection Method 【 2 】	
A1SJ,A2SH,A1SH	A1SJ71UC24-R4	RS-422	Connection Method 【 2 】	
	A1SJ71UC24-R2	RS-232C	Connection Method 【 1 】	
A2CCPU24	The link unit on a CPU unit	RS-232C	Connection Method 【 1 】	

Procedure to connect GP to PLC

Select PLC type via GP-PRO/PBIII
C-Package

Refer to

Select PLC type



GP and PLC system settings
should follow the example.

Refer to

System Setting Example



Set GP system settings.
There are 2 settings methods. Use either one.
Set via GP-PRO/PBIII C-Package
And Transfer settings
Set via offline menu of GP

Refer to

System Setting

【GP】



Set PLC's system settings.

Refer to

System Setting 【PLC】



Connect GP to PLC
Verify the connection method matches
connection format, distance, etc.

Refer to **Connection**

**Method & Recommended
products**

Select PLC type

When creating a project file, select the following PLC type.



System Setting Example

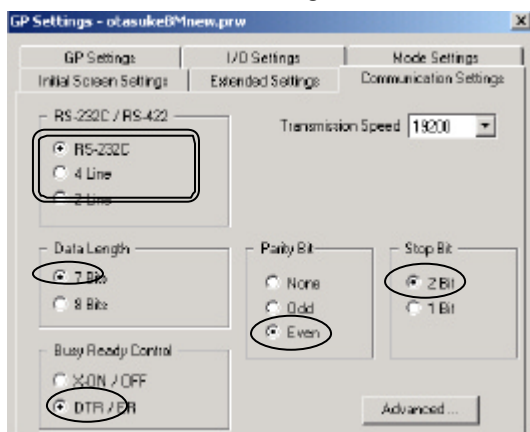
GP Setting		Calculator link unit	
Transmission Speed	19200bps	Transmission Speed	19200bps
Data length	7bit	Data bit	7bit
Stop bit	2bit	Stop bit	2bit
Parity bit	Even	Parity presence even/odd parity	Yes Even
Busy Ready Control	ER	Channel setting	RS-232C
Communication format (when using RS-232c)	RS-232C	Mode setting (when using RS-232C)	4 (protocol mode of form 4)
Communication format (when using RS-422)	4 wire type	Channel setting	RS-422
		Mode setting (when using RS-422)	8 (protocol mode of form 4)
-----		Write-in propriety during run	Possible
-----		Sum check presence	Yes

Machine Number	0	Unit No.	0

System Setting 【GP】

1 【Setting up by GP-PRO/PBIII C-Package】

①Communication settings

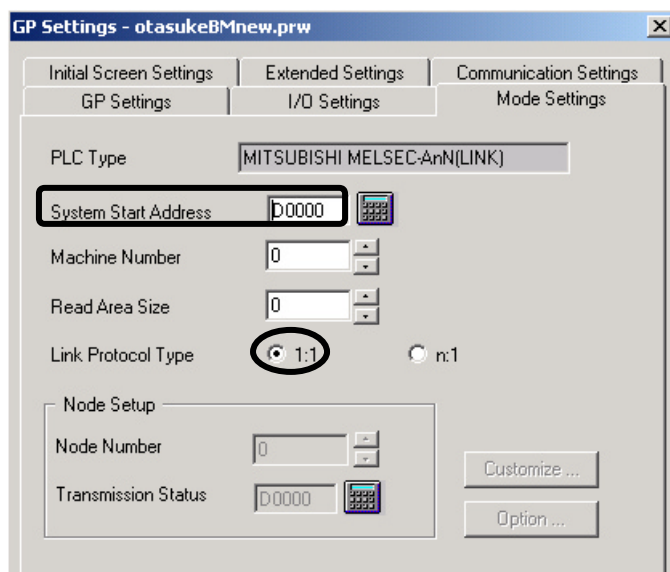


①Communication settings

Transmission Speed :19200bps
 Data Length :7 bits
 Stop Bit :2bits
 Parity Bit :Even
 Busy Ready Control: ER
 Communication Format
 RS-232C :RS-232C
 RS-422 :4-wire type

* For choose desired setting.

②Mode settings



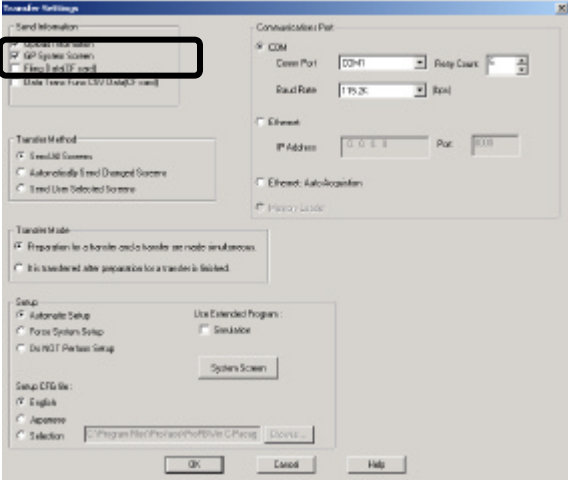
②Mode settings

System Start Address :Optional addresses

Machine Number :0

Link Protocol Type :1 : 1

Set the screen of 「Transfer」 → 「Setup」 → 「Transfer Settings」

③Transfer settings	③Transfer settings
	GP System Screen :Checked

After the settings are complete, transfer them to GP.

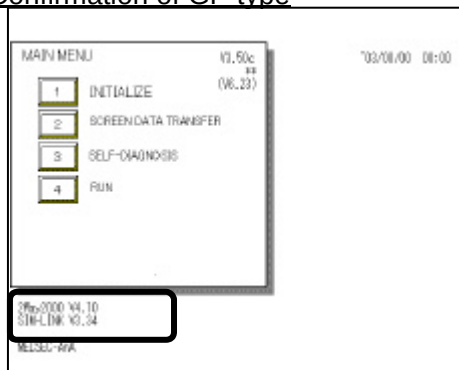
2 【Settings via GP】 Offline Menu

— Display Setting Screen —

Within 10 seconds after the power supply turns on, push the upper left corner of the screen. Otherwise, push the upper right corner while pushing the lower right corner.

In that condition, push the lower left corner and the menu bar will display on the below part of the screen. Touch [Offline].

①Confirmation of GP type

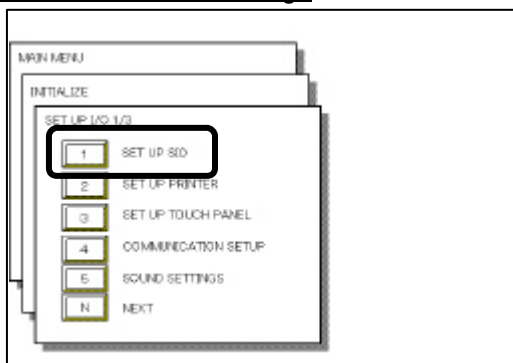


①Confirmation of GP type

When Mitsubishi MELSEC—AnN (LINK) is chosen, it is displayed as follows.

「MELSEC—AnN」

②Communication settings



②Communication settings

「MAIN MENU」



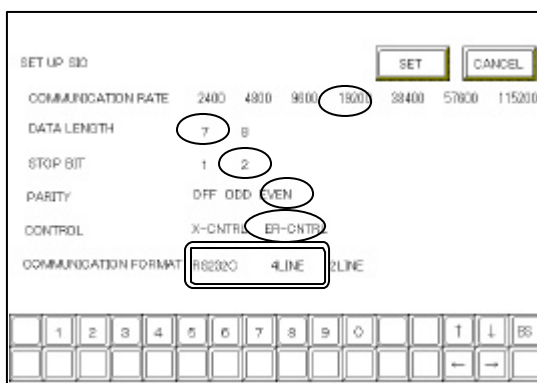
「INITIALIZE」



「SET UP I/O」



「SET UP SIO」



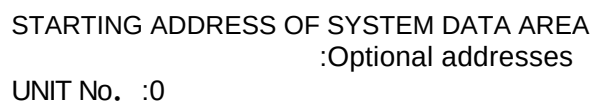
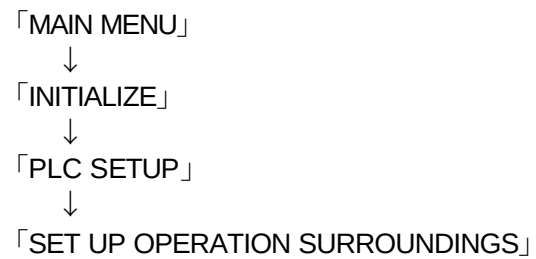
COMMUNICATION RATE :19200bps
DATA LENGTH :7bit
STOP BIT :2bit
PARITY :Even
CONTROL :ER-CNTL
COMMUNICATION FORMAT
RS-232C use :RS-232C
RS-422 use :4-wire type

*



Please select the desired setting.

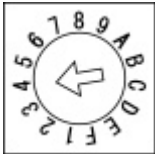
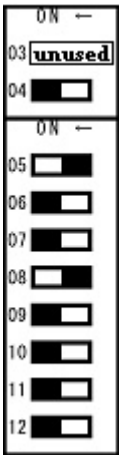
③SET UP OPERATION SURROUNDINGS



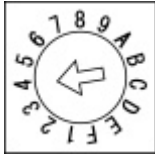
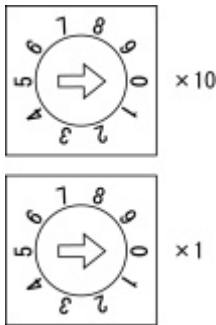
System Setting 【PLC】

1 【RS-232C】

1-1 【When using Calculator link unit A1SJ71C24-R2/A1SJ71UC24-R2】

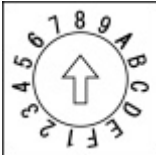
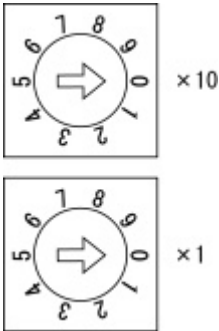
①Mode settings MODE 	①Mode settings 4 (Form 4 protocol mode)																				
②Communication settings Please set a switch by the black side.  <table> <tr> <td>SW03</td><td>No Use</td></tr> <tr> <td>SW04</td><td>ON</td></tr> <tr> <td>SW05</td><td>OFF</td></tr> <tr> <td>SW06</td><td>ON</td></tr> <tr> <td>SW07</td><td>ON</td></tr> <tr> <td>SW08</td><td>OFF</td></tr> <tr> <td>SW09</td><td>ON</td></tr> <tr> <td>SW10</td><td>ON</td></tr> <tr> <td>SW11</td><td>ON</td></tr> <tr> <td>SW12</td><td>ON</td></tr> </table>	SW03	No Use	SW04	ON	SW05	OFF	SW06	ON	SW07	ON	SW08	OFF	SW09	ON	SW10	ON	SW11	ON	SW12	ON	②Communication settings Transmission Rate :19200bps Data bit :7 bit Stop bit :2 bit Parity Check :Yes Parity Even/Odd :Even Write possible during Run mode :Possible Sum check :Yes
SW03	No Use																				
SW04	ON																				
SW05	OFF																				
SW06	ON																				
SW07	ON																				
SW08	OFF																				
SW09	ON																				
SW10	ON																				
SW11	ON																				
SW12	ON																				

1-2 【When using the link unit on a A2CCPU24 CPU CPU unit】

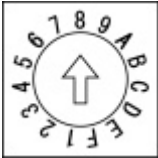
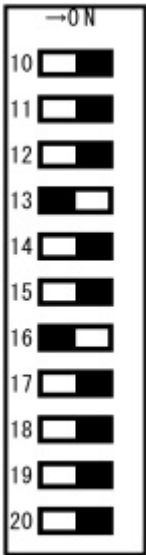
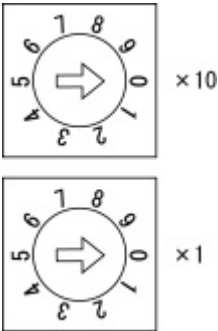
①Mode settings MODE 	①Mode settings 4 (Form 4 protocol mode)
②Communication settings Please set a switch by the black side  SW11 OFF SW12 ON SW13 ON SW14 ON SW15 ON SW16 ON SW17 OFF SW18 ON SW19 OFF SW20 ON	②Communication settings Transmission Rate : 19200bps Data bit : 7 bit Stop bit : 2 bit Parity Check :Yes Parity even/odd :Even Write possible during Run mode :Possible Sum check :Yes
③Station number settings STATION NO. 	③Station number settings Station 0

2 【RS-422】

2-1 【When using Calculator link unit A1SJ71C24-R4／A1SJ71UC24-R4】

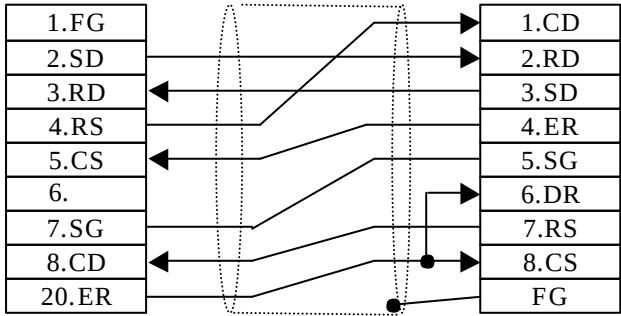
①Mode settings MODE 	①Mode settings 8 (Form 4 protocol mode)
②Communication settings Please set a switch by the black side  SW01 No Use SW02 ON SW03 No Use SW04 ON SW05 OFF SW06 ON SW07 ON SW08 OFF SW09 ON SW10 ON SW11 ON SW12 ON	②Communication settings Transmission Rate :19200bps Data bit :7 bit Stop bit :2 bit Parity Check :Yes Parity even／odd :Even Write possible during Run mode :Possible Sum check :Yes
③Station number settings STATION NO. 	③Station number settings Station 0

2-2 【When using Calculator link unit AOJ2-C214-S1】

①Mode settings MODE 	①Mode settings 8 (Form 4 protocol mode)
②Communication settings Please set a switch by the black side  SW10 ON SW11 ON SW12 ON SW13 OFF SW14 ON SW15 ON SW16 OFF SW17 ON SW18 ON SW19 ON SW20 ON	②Communication settings Transmission Rate :19200bps Data bit :7 bit Stop bit :2 bit Parity Check :Yes Parity even/odd :Even Write possible during Run mode :Possible Sum check :Yes
③Station number settings STATION NO.  x10 x1	③Station number settings Station 0

Connection Method

【1】 RS-232C

Type	Communication Method	Distance
When to use GP000-IS02-MS		3m
When to create the cable	GP side (25p male) PLC side(9p male)  Shield	Within 15m



Please be sure to connect SG.



Note:

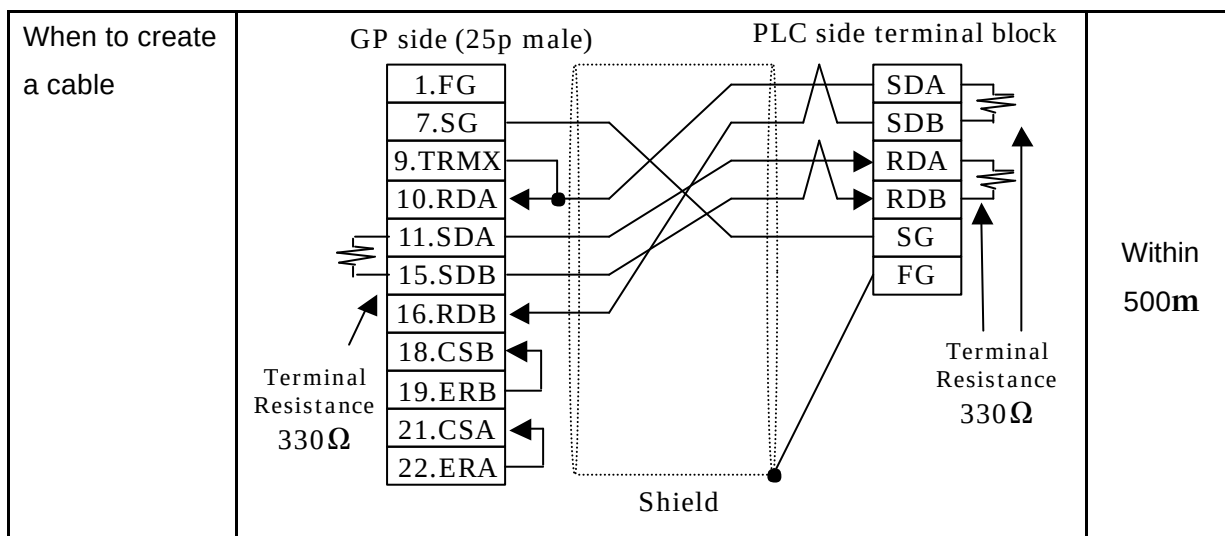
Option cable GP000-IS02-MS is set only to 3 m, please make himself,
if you connect by the other length.

Recommended products

GP connector/ Cover	Dsub25 pin plug	XM2A-2501	<Omron makes>
	Dsub25 cover for pin	XM2S-2511	<Omron makes>
	Screw Jacks	XM2Z-0071	<Omron makes>
Cable	CO-MA-VV-SB5P × 28AWG <Hitachi cable, Ltd. makes>		
Lock screw	Meter coarse thread M2.6 × 0.45 pitch		

【2】 RS-422 Connection

Type	Communication Method	Distance
When using GP230-IS11-0	Cable side 6 separated line PLC side 6 pole terminal block GP side(25p male) GP230-IS11-0 PLC side terminal block Terminal resistance 330Ω	5m
When extending using GP230-IS11-0	Cable side 6 separated line PLC side 6 pole terminal block GP side(25p male) GP230-IS11-0 Terminal Resistance 330Ω GP230-IS11-0 (3m) Making your own cable Terminal Resistance 330Ω	5~500m
When using GP070-CN10-0	Gender changer PLC side terminal block Terminal Resistance 330Ω GP070-CN10-0 Shield Terminal Resistance 330Ω	Within 500m



• Please be sure to connect SG.

• About Terminator

PLC side : Between SDA-SDB Between RDA-RDB 330Ω
(The number of watt specified by the PLC side)

GP side : Required part(refer to connection figure.) 330Ω
(The number of watt specified by the PLC side)

Recommended products

GP connector/ Cover	Dsub25 pin plug	XM2A-2501 <Omron makes>
	Dsub25 cover for pin	XM2S-2511 <Omron makes>
	Screw Jacks	XM2Z-0071 <Omron makes>
Cable	SPEV(SB)-MPC-0.2*3P <MITSUBISHI CABLE INDUSTRIES, LTD. makes>	
Lock screw	Meter coarse thread M2.6 × 0.45 pitch	