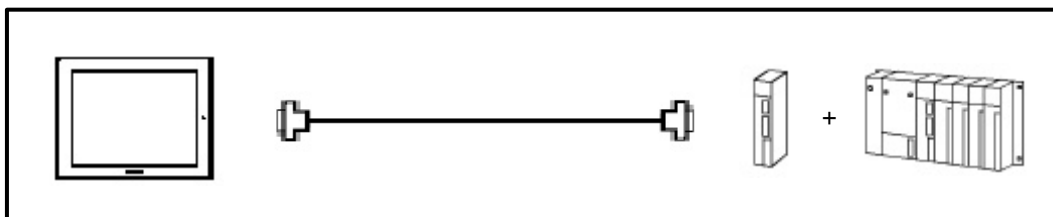


Mitsubishi < 1 > Mitsubishi Electric PLC

「 A Series (AnU,AnA) + LINK unit (Large-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 
A2A、 A3A A2U、 A3U、 A4U	AJ71C24-S6 AJ71C24-S8 AJ71UC24	RS-232C	Connection Method 【 1 】	
		RS-422	Connection Method 【 2 】	

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.



Mitsubishi Electric
MELSEC AnA (LINK)

System Setting Example

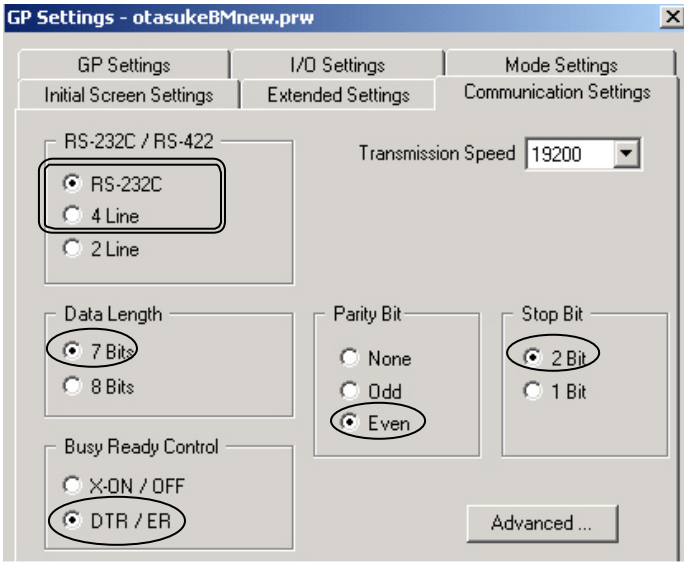
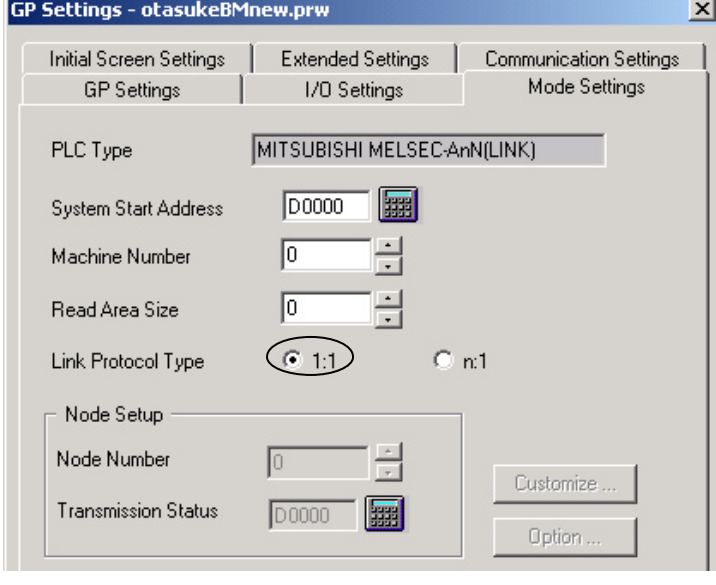
GP Setting		Calculator link unit	
Transmission Speed	19200bps	Transmission Speed	19200bps
Data length	7bit	Data bit	7bit
stop bit	2bit	stop bit	2bit
parity bit	even number	parity presence even/odd number parity	Yes Even number
Busv Ready Control	ER	-----	
Communication method (RS232C use)	RS-232C	Channel setting Mode setting(RS-232C use)	RS-232C 4(protocol mode of form4)
Communication method (RS422C use)	4 line type	Channel setting Mode setting(RS-422C use)	RS-422 8(protocol mode of form4)
-----		Write-in propriety during run	Possible
-----		sum check presence *1	Yes
-----		Sending end terminator *1	Yes *1
-----		Reception side end terminator	Yes *1
No. of machine number	0	Unit No.	0

*1 AJ71UC24 does not have this setup.

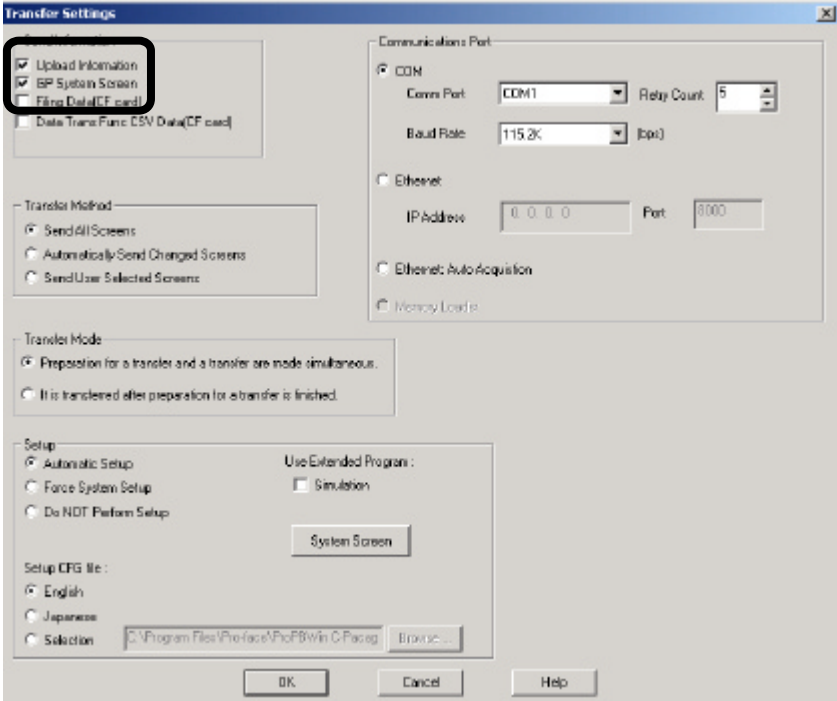
System Setting 【GP】

1 【Setting up by GP-PRO/PB C-Package】

"GP Setup" is chosen from a project manager screen.

Communication settings	Communication settings
	Transmission Speed : 19200bps Data length : 7bit Stop-bit : 2bit Parity-bit : Even Busy Ready Control : ER Communication method RS-232C connection use:RS-232C RS-422 connection use: RS-422 4wires
	* For choose desired setting.
Mode settings	Mode settings
	System Start Address : optional address Machine number : 0 Link Protocol Type : 1 : 1

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

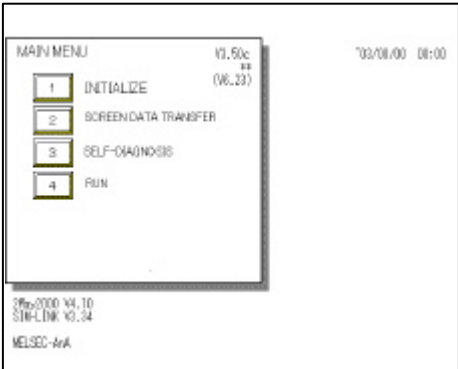
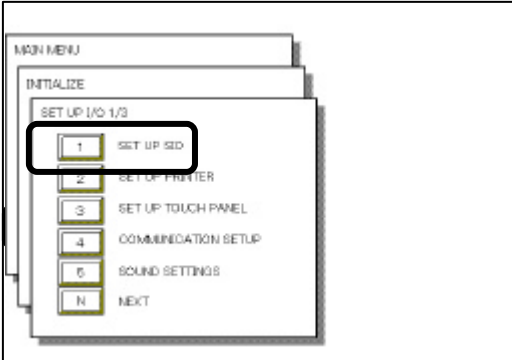
Transfer settings  <th data-bbox="1038 360 1441 1216"> Transfer settings GP System Screen : checked </th>	Transfer settings GP System Screen : checked
--	--

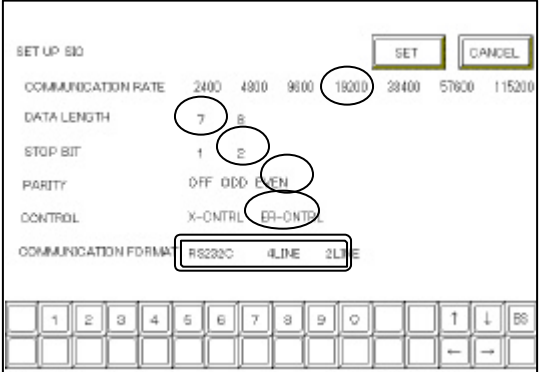
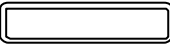
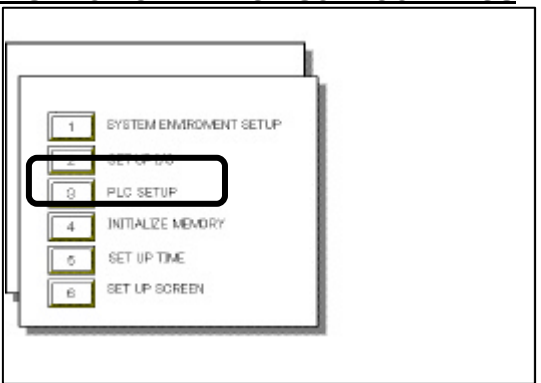
After the settings are complete, transfer them to GP.

2 【Set up 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].

 <u>Confirm GP type</u>	<u>Confirm GP type</u> When Mitsubishi MELSEC - AnA(LINK)s chosen, it is displayed as follows. 「MELSEC - AnA」
<u>System Settings</u> 	<u>System Settings</u> 「MAIN MENU」 ↓ 「INITIALIZE」 ↓ 「SET UP I/O」 ↓ 「SET UP SIO」

	COMMUNICATION RATE : 19200bps DATA LENGTH : 7bit STOP BIT : 2bit PARITY : Even CONTROL : E R-CNTL COMMUNICATION FORMAT RS-232C use : RS-232C RS-422 use : 4 LINE *  Please select the desired setting.
SET UP OPERATION SURROUNDINGS 	SET UP OPERATION SURROUNDINGS 「MAIN MENU」 ↓ 「INITIALIZE」 ↓ 「PLC SETUP」 ↓ 「SET UP OPERATION SURROUNDINGS」
	OPERATION SURROUNDINGS : 1 : 1

SET UP OPERATION SURROUNDINGS

SET CANCEL

STARTING ADDRESS OF SYSTEM DATA AREA [00000]

UNIT NO. [0]

SYSTEM AREA READING AREA SIZE (0-256) [0]

RESET QP ON DATA WRITE ERROR ON OFF



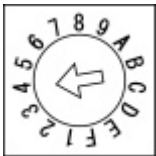
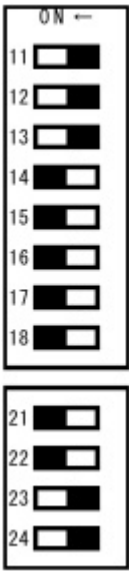
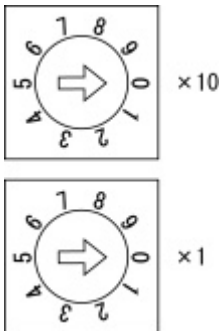
STARTING ADDRESS OF SYSTEM DATA AREA
: Optional addresses

UNIT No . : 0

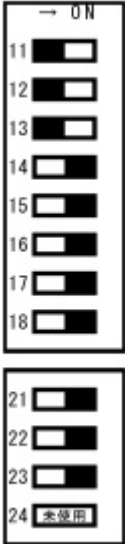
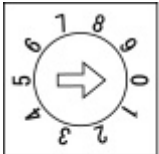
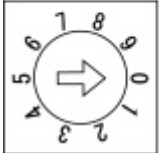
System Setting 【PLC】

1 【RS-232C】

1 - 1 【When to use Calculator link unit AJ71C24-S6 / AJ71C24-S8】

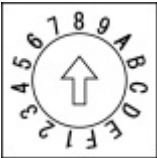
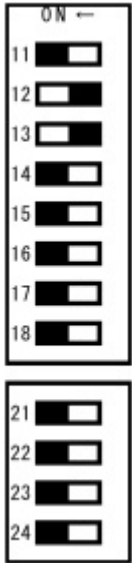
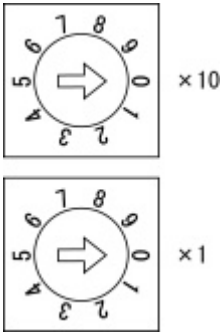
<u>Mode settings</u> MODE 	<u>Mode settings</u> 4 (Form 4 protocol mode)
<u>Communication settings</u> Please set a switch by the black side  SW11 OFF SW12 OFF SW13 OFF SW14 ON SW15 ON SW16 ON SW17 ON SW18 ON SW21 ON SW22 ON SW23 OFF SW24 OFF	<u>Communication settings</u> Transmission Rate : 19200bps Data bit : 7 bit Stop bit : 2 bit Parity Check : Yes Parity Even / Odd : Even Write possible during Run mode : Possible Sum check : Yes Sending end terminator : Yes Reception side end terminator : Yes
<u>Station number settings</u> STATION NO  x10 x1	<u>Station number settings</u> Station 0

1 - 2 【When to use Calculator link unit AJ71UC24】

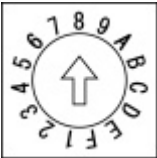
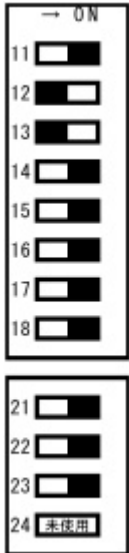
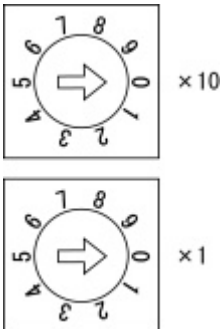
<u>Mode settings</u> MODE 	<u>Mode settings</u> 4 (Form 4 protocol mode)
<u>Communication settings</u> Please set a switch by the black side  SW11 OFF SW12 OFF SW13 OFF SW14 ON SW15 ON SW16 ON SW17 ON SW18 ON SW21 ON SW22 ON SW23 ON SW24 NO USE	<u>Communication settings</u> Transmission Rate : 19200bps Data bit : 7 bit Stop bit : 2 bit Parity Check : Yes Parity even / odd : Even Write possible during Run mode : Possible Sum check : Yes
<u>Station number settings</u> STATION NO  × 10  × 1	<u>Station number settings</u> Station 0

2 【RS-422】

2 - 1 【When to use Calculator link unit AJ71C24-S6 / AJ71C24-S8】

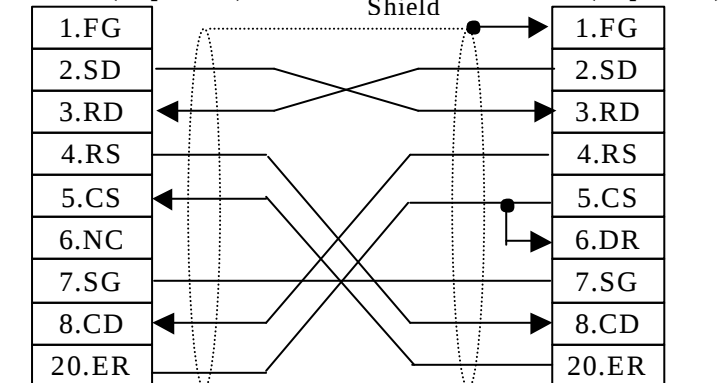
<u>Mode settings</u> MODE 	<u>Mode settings</u> 8 (form 4 protocol mode)
<u>Communication settings</u> Please set a switch by the black side  SW11 ON SW12 OFF SW13 OFF SW14 ON SW15 ON SW16 ON SW17 ON SW18 ON SW21 ON SW22 ON SW23 ON SW24 ON	<u>Communication settings</u> Transmission Rate : 19200bps Data bit : 7 bit Stop bit : 2 bit Parity Check : Yes Parity even / odd : Even Write possible during Run mode : Possible Sum check : Yes Sending end terminator : Yes Reception side end terminator : Yes
<u>Station number settings</u> STATION NO 	<u>Station number settings</u> Station 0

2 - 2 【When to use Calculator link unit AJ71UC24】

<u>Mode settings</u> MODE 	<u>Mode settings</u> 8 (Form 4 protocol mode)
<u>Communication settings</u> Please set a switch by the black side  SW11 ON SW12 OFF SW13 OFF SW14 ON SW15 ON SW16 ON SW17 ON SW18 ON SW21 ON SW22 ON SW23 ON SW24 No Use	<u>Communication settings</u> 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
<u>Station number settings</u> STATION NO 	<u>Station number settings</u> Station 0

Connection Method

【 1 】 RS-232C

Type	Communication Method	Distance
When to use GP410-IS00-O		5m
When to create the cable	GP side (25p male) Shield PLC side (25p male) 	Within 15m

Important

Please be sure to connect SG.

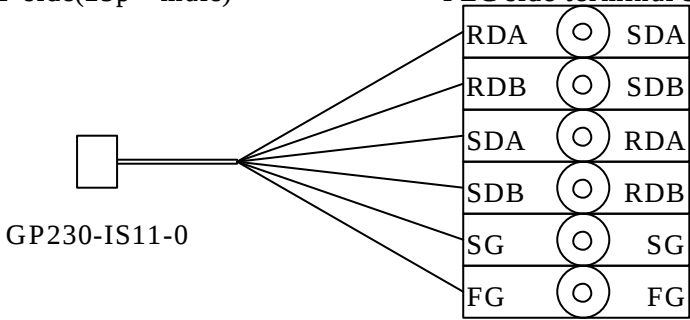
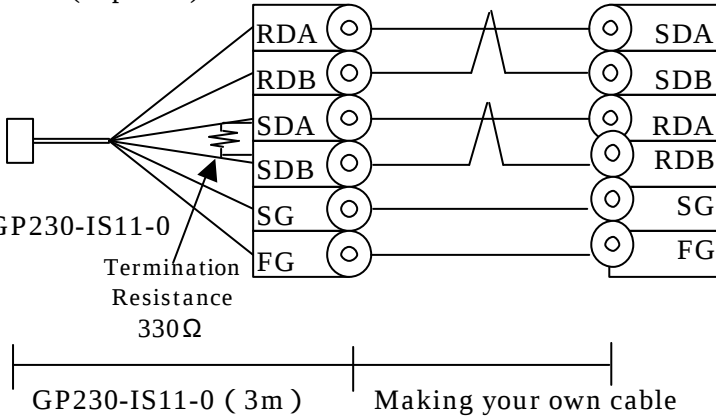
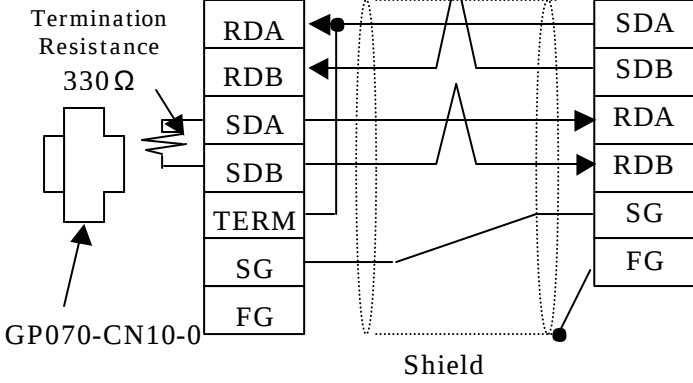
Memo

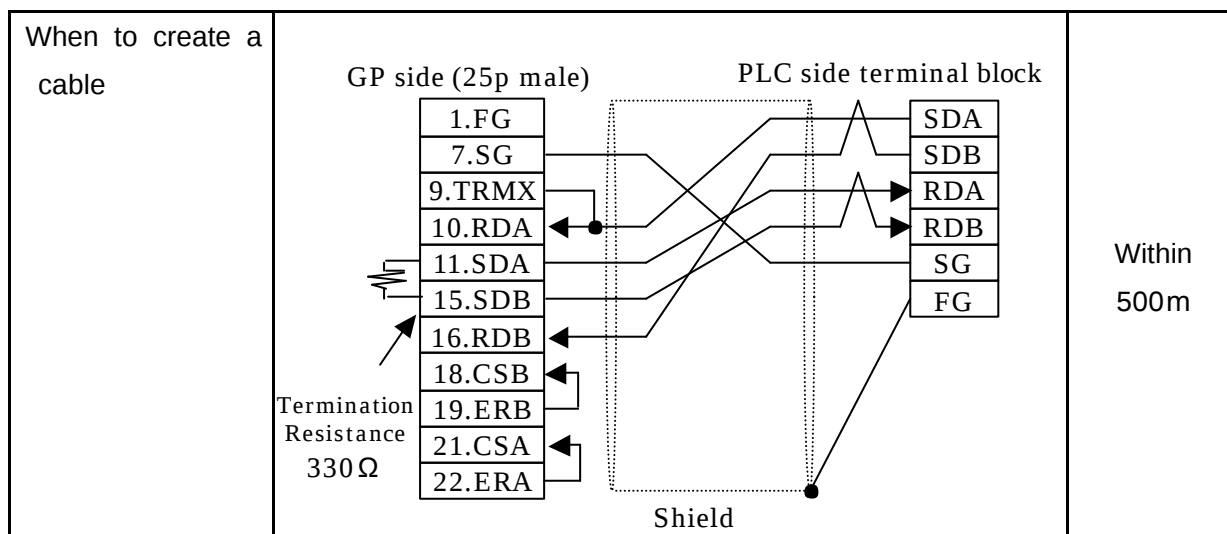
Option cable GP410-IS00-O is set only to 5m, please make himself, when you connect by the other length.

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

Type	Communication Method	distance
When to use GP230-IS11-0	Cable side 6 separated line GP side(25p male) PLC side 6pole terminal block PLC side terminal block 	5m
When to use GP230-IS11-0	Cable side GP side(25p male) 6 separated line PLC side 6 pole terminal block 	5 ~ 500m
When to use GP070-CN10-0	Gender changer PLC side terminal block 	Within 500m



Important

- Please be sure to connect SG.
- Please turn ON the terminator switch by the side of PLC. (except of AJ71UC24)
- About the terminator in the case of using AJ71UC24.

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)		

Recommendation article

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		