31.5 Mapping I/O to the FLEX NETWORK Analog Unit

31.5.1 Device Settings for the FLEX NETWORK

When connecting a FLEX NETWORK unit to the GP, select the display model which supports it.

You can connect multiple I/O units.

Model of FlexNetwork Analog Unit and Number of Occupied Stations

The following table lists the type and number of points, and number of occupied stations for the FLEX NETWORK analog unit.

Туре	Model	No. of Points	No. of Occu- pied Stations	Page for Details	
Analog	FN-AD02AH	2chA/D	1 station		
	FN-AD04AH	4chA/D	4 stations	P no no 21 21	
	FN-DA02AH	2chD/A	1 station	- page 31-21	
	FN-DA04AH	4chD/A	4 stations		

Setup Procedure

1 In the I/O Driver Settings window, select the I/O unit to be configured, and click [Setting].

I/O Driver Settings
Int. Driver 1
FLEX NETWORK Driver(ID:#1) Transfer speed:6Mbps I/O Driver Settings
<u>U</u> nit
S-No Model Details
1 FN-X16TS Input Points:16 Type:Bit
Add Setting Bemove

2 The [Unit Settings] dialog box is displayed. To change the type, in the [Model] area, select the model of I/O unit. (e.g. [Analog] and "FN-AD02AH").

📙 Unit Settings	×
<u>M</u> odel	Information
Analog FN-AD02AH FN-AD04AH FN-DA02AH FN-DA02AH FN-DA04AH	TCH Range0-10V Filter typemone
<u>S-No.</u> 1	<u>D</u> etails
	<u>Q</u> K <u>C</u> ancel

- **NOTE** The type of the I/O unit can be selected in the top left menu.
 - On the right, the detailed specifications of the selected I/O unit are displayed.
- **3** In [S-No.] enter the S-No. for the connected I/O unit.

🛃 Unit Settings	×
Model Analog ▼ FN-AD04AH FN-AD04AH FN-DA04AH FN-DA04AH	Infomation ICH Range-0-10V Filter typenone

• 1 to 63 can be set for S-No., and the same S-No. cannot be set in the same FLEX NETWORK.

⁽ ■ Model of FlexNetwork Analog Unit and Number of Occupied Stations" (page 31-21)

- 4 To change the details of the I/O unit, click [Details].
- 5 The [Details] dialog box is displayed. Change the settings and click [OK].

• For the detail settings of the unit, refer to the following section. ⁽³⁾ "31.5.3 Setup Guide for the FLEX NETWORK Analog Unit ■ Unit Detail Settings" (page 31-26)

6 In the [Unit Settings] dialog box, click [OK] to apply the changed settings.

S-No	Model	Details
1	FN-AD02AH	Range:0-10V

7 To add an I/O unit, click [Add]. In the displayed [Unit Settings] dialog box, specify the settings in the same way as in steps 2 to 6.



8 After completing the device settings for the FLEX NETWORK, map addresses to the I/O terminals.

NOTE "31.5.2 I/O Terminals in the FLEX NETWORK Analog Unit" (page 31-23)

31.5.2 I/O Terminals in the FLEX NETWORK Analog Unit

Displays the I/O Screen and maps addresses to the I/O terminals in the FLEX NETWORK analog unit.

■ Displaying the I/O Screen

1 Click the [Screen List] tab to open [Screen List] Window.

Screen List		4 X
Screen Type All		•
Refine Search		Search
12 6 8 × 1	l 💋 🍇	
🚱 Base Screen		
	0001	(Untitled)
🚱 Window Screen		
🎲 Logic Screen		
	INIT	(Untitled)
	MAIN	(Untitled)
🚱 I/O Screen		
	FLEX N	(Untitled)
•		
🕅 Syste 🔛 Addr	e 🚺 Con	🔡 Scree

• If the [Screen List] tab is not displayed in the Work Space, on the [View (V)] menu, point to [Work Space (W)] and then click [Screen List Window (G)].

2 Double-click the [I/O Screen] to display the I/O in the workspace.



• For how to map addresses to I/O terminals, refer to the following section.

■ I/O Terminal Operations

An I/O terminal to which an address is mapped operates as described below.

- The A/D conversion unit converts an analog input value to a digital value.
- In the opposite way, the D/A conversion unit converts a digital input value to an analog value.
- For details, refer to "Analog Unit Users Manual 2.3 Diagram of Analog Characteristics".
- For details on how to acquire data values according to the filter type, refer to "Analog Unit Users Manual 2.4 Analog/Digital Conversion".
- If a power interruption occurs on the I/O unit, the driver can recognize it and resume communications after the power is restored.

31.5.3 Setup Guide for the FLEX NETWORK Analog Unit

■ I/O Screen

🔁 🐰 I	🔁 🖑 🗙 👘		
FLEX NE	TWORK Driver(ID:#	1)	
Name	Variable	IEC Address	
🕀 👖 S-1	No.1 (FN-AD02AH)		
	CH1	(%0W.1.1.1)	
I 🐻 (CH2		

Setting	Description
Сору 🔁	To copy a variable select it and click the icon.
Cut 👗	To cut a variable select it and click the icon.
Paste 🖪	To paste a variable, Copy or Cut it to the clipboard and then click the icon.
Edit 🗳	To change a variable or register a new variable, select it and click the icon.
Delete X	To delete a variable select it and click the icon.
Name	Displays the terminal ID symbol.
Variable	Displays the address mapped to the terminal.
IEC Address	Displays the I/O address (IEC address).

Unit Detail Settings

🔜 Ditails 🛛 🗙	🔜 Ditails 🛛 🔀
Mode © 20H 1CH © 20H Banee 0-10V 0-10V Image 0-10	1CH Filter Type Type none Sampling Frequency 2 3 B C Drop high/low Drop high/low 3CH Filter Type C none Sampling Frequency 2 A Sampling Frequency A Sampling Frequency Sampling Frequency 3CH Filter Type none Sampling Frequency Sampling Frequency 2 A 4 A
2chA/D (FN-AD02AH)	Drop high/low Drop high/low
Ditails X Mode C 1CH © 2CH 1CH 2CH Range 0-10V 0-10V Image 0-10V Image	4chA/D (FN-AD04AH)

2chD/A (FN-DA02AH)

<u>o</u>k)

<u>C</u>ancel

Setting	Description
Mode	Select [2CH] or [1CH] in the 2-ch analog unit. [2CH] is set by default.
Range	Set the range (resolution) in the 2-ch analog unit. 0-10V : 0 - 4095 0-20mA : 0 - 4095 4-20mA : 0 - 4095 [0-10V] is set by default. NOTE • The range (resolution) of the 4-ch analog unit is set in the main unit. 0-5V : 0 - 4095 1-5V : 0 - 4095 0-10V : 0 - 4095 -5-5V : -2047 - 2047 -10-10V: -2047 - 2047 0-20mA: 0 - 4095 4-20mA: 0 - 4095

Continued

Setting	Description
Filter Type	Select the filter type. 2-ch analog : None, Moving Average 4-ch analog : None, Average, Moving Average [None] is set by default. For details on filter, refer to "Analog Unit Users Manual 2.4 Ana- log/Digital Conversion".
Sampling Frequency	Select the number of samples for A/D conversion. When the filter type is set to [None], this option can be selected. 2-ch analog : $2/4/8/16/32/64$ 4-ch analog : $2/4/8/16/32/64/128/256/512/1024/2048/4096/$ 8192/16384/32768/65535 [2] is set by default.
Drop high/low	Specify whether to remove the maximum and minimum values in the sample data. This option can be selected if the number of sam- ples for A/D conversion is set to 4 or higher. If the number of sam- ples is fewer than 4, this option cannot be selected.