

## 31.5 Mapping I/O to the FLEX NETWORK Analog Unit

### 31.5.1 Display 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.

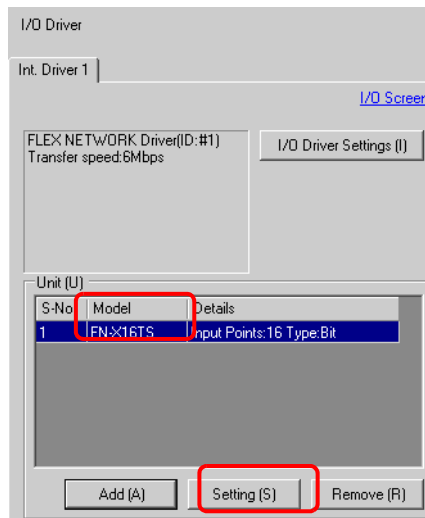
#### ■ FLEX NETWORK Analog Unit Models and Number of Occupied Stations

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

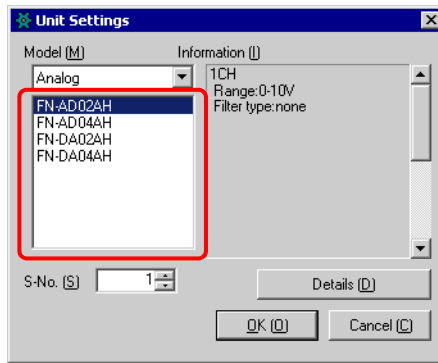
Type	Type	Number of Points	Number of Occupied Stations	Page for Details
Analog	FN-AD02AH	2chA/D	1 station	👉 page 31-24
	FN-AD04AH	4chA/D	4 stations	
	FN-DA02AH	2chD/A	1 station	
	FN-DA04AH	4chD/A	4 stations	

#### ■ Setup Procedure

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

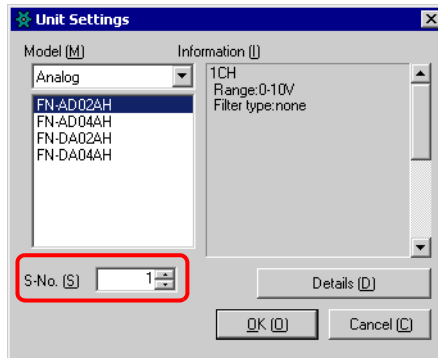


2 The [Unit Settings] dialog box is appears. To change the type, in the [Model] area, select the model of I/O unit. (For example, [Analog] and "FN-AD02AH").



- 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 Specify the same number as the S-Number specified on the analog unit.



- NOTE**
- You can specify the S-Number from 1 to 63. However, you cannot duplicate the S-Number in the same FLEX NETWORK.  
 ☞ “ ■ FLEX NETWORK Analog Unit Models and Number of Occupied Stations” (page 31-24)

4 To change the details of the I/O unit, click [Details].

5 The [Details] dialog box is appears. Change the settings and click [OK].

- NOTE**
- For the detail settings of the unit, refer to the following section.  
 ☞ “31.5.3 Setup Guide for the FLEX NETWORK Analog Unit ■ Unit Detail Settings” (page 31-29)

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

S-No	Model	Details
1	FN-AD02AH	1CH Range:0-10V Filter type:n

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

**NOTE**

- To add other types, refer to the descriptions of each type.
  - ☞ “31.4 Mapping I/O to the FLEX NETWORK DIO Unit” (page 31-17)
  - ☞ “31.6 Mapping I/O to the FLEX NETWORK Positioning Unit” (page 31-31)
  - ☞ “31.7 Mapping I/O to the FLEX NETWORK High-Speed Counter Unit” (page 31-37)

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

**NOTE**

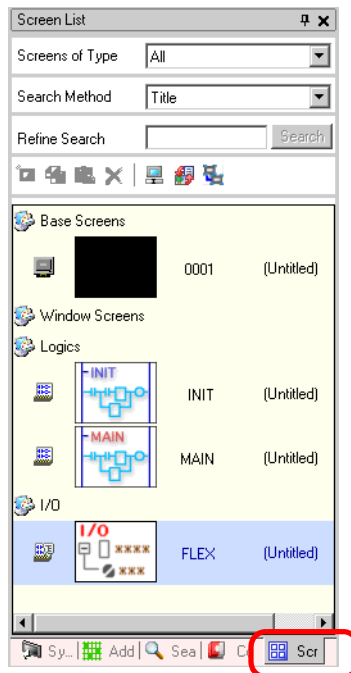
- ☞ “31.5.2 I/O Terminals in the FLEX NETWORK Analog Unit” (page 31-26)

### 31.5.2 I/O Terminals in the FLEX NETWORK Analog Unit

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

#### ■ Displaying the I/O

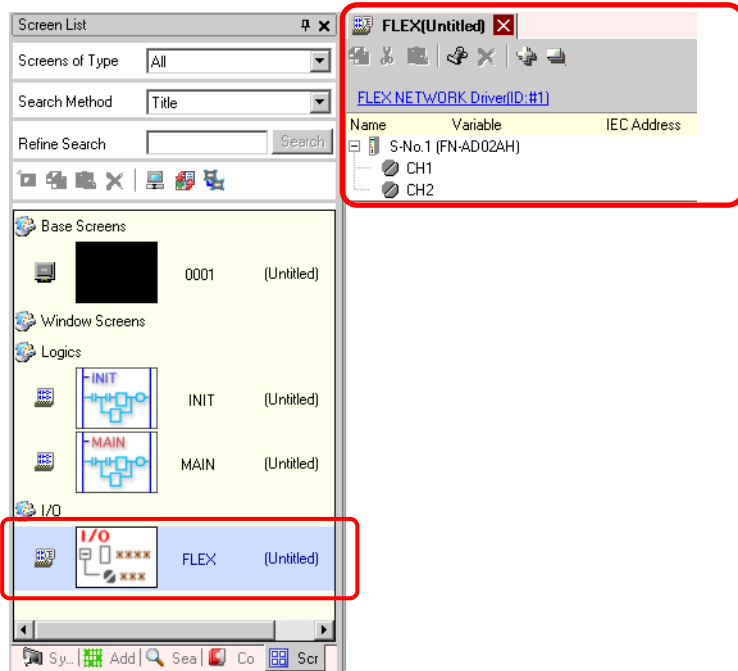
1 Click the [Screen List] tab to open [Screen List] Window.



**NOTE**

- 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 (G)].

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



**NOTE**

- For how to map addresses to I/O terminals, refer to the following section.  
 ➔ "31.1.2 Mapping Addresses to I/O Terminals" (page 31-7)

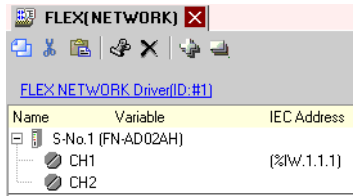
■ **I/O Terminal Operations**

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.

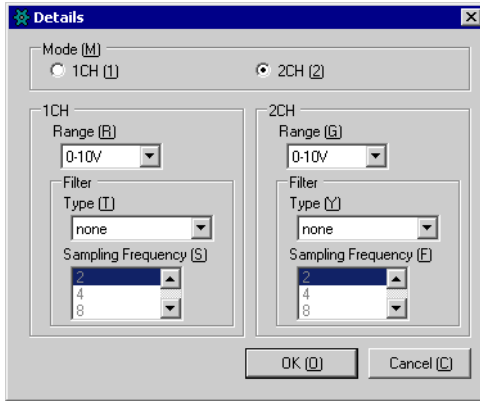
### 31.5.3 Setup Guide for the FLEX NETWORK Analog Unit

#### ■ I/O Screen

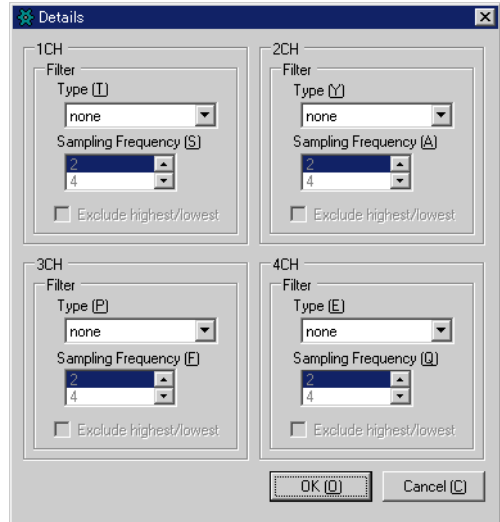


Setting		Description
Copy		To copy a variable select it and click the icon.
Cut		To cut a variable select it and click the icon.
Paste		To paste a variable, Copy or Cut it to the clipboard and then click the icon.
Edit		To change a variable or register a new variable, select it and click the icon.
Delete		To delete a variable select it and click the icon.
Expand All		Expands to display all I/O terminals.
Collapse All		Collapses to hide display of all I/O terminals.
FLEX NETWORK Driver (ID:#1)		Click to switch to the I/O Driver settings screen.
Name		Displays the terminal ID symbol.
Variable		Displays the address mapped to the terminal.
IEC Address		Displays the I/O address (IEC address).

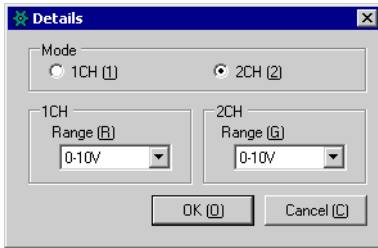
■ Unit Detail Settings



2chA/D  
(FN-AD02AH)



4chA/D  
(FN-AD04AH)



2chD/A  
(FN-DA02AH)

Setting	Description
<b>Number of Channels to be Used</b>	Select [2CH] or [1CH] in the 2-channel analog unit. [2CH] is set by default.
<b>Range</b>	<p>Set the range (resolution) in the 2-channel analog unit.</p> <p>0-10V : 0 - 4095                      0-20mA : 0 - 4095                      4-20mA : 0 - 4095                      [0-10V] is set by default.</p> <ul style="list-style-type: none"> <li>The range (resolution) of the 4-channel analog unit is set in the main unit.</li> </ul> <p>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</p>

Continued

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