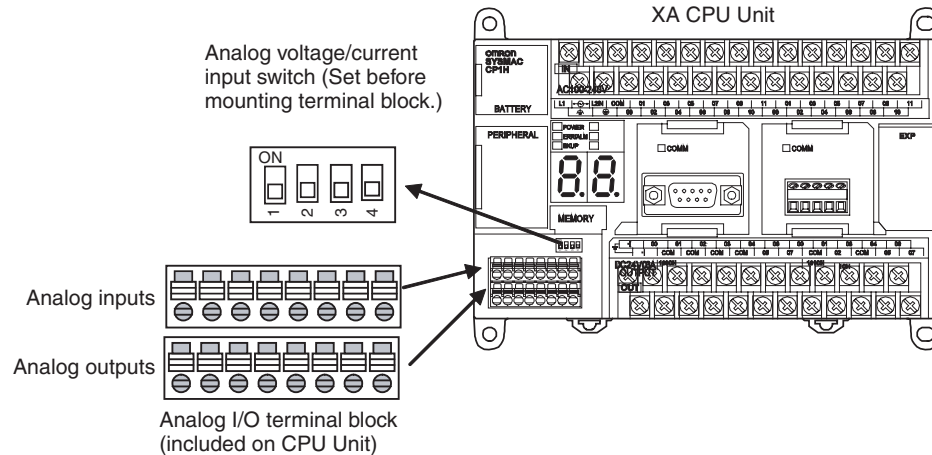


3-5-5 Wiring Built-in Analog I/O (XA CPU Units Only)

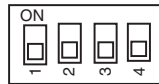
XA CPU Units come with an analog I/O terminal block. To use the analog I/O, first set the voltage/current input switch and then mount the terminal block.



Setting the Analog Voltage/Current Input Switch

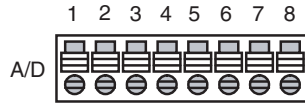
This switch must be set before the terminal block is mounted.

Use a screwdriver with a thin blade and be careful not to damage the internal board.



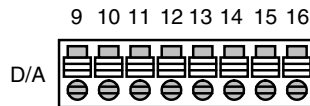
Pin	Input	Function
1	Input 1	ON: Current input OFF: Voltage input (Default: Voltage input)
2	Input 2	
3	Input 3	
4	Input 4	

Analog Input Terminal Block



Pin	Function
1	IN1+
2	IN1-
3	IN2+
4	IN2-
5	IN3+
6	IN3-
7	IN4+
8	IN4-

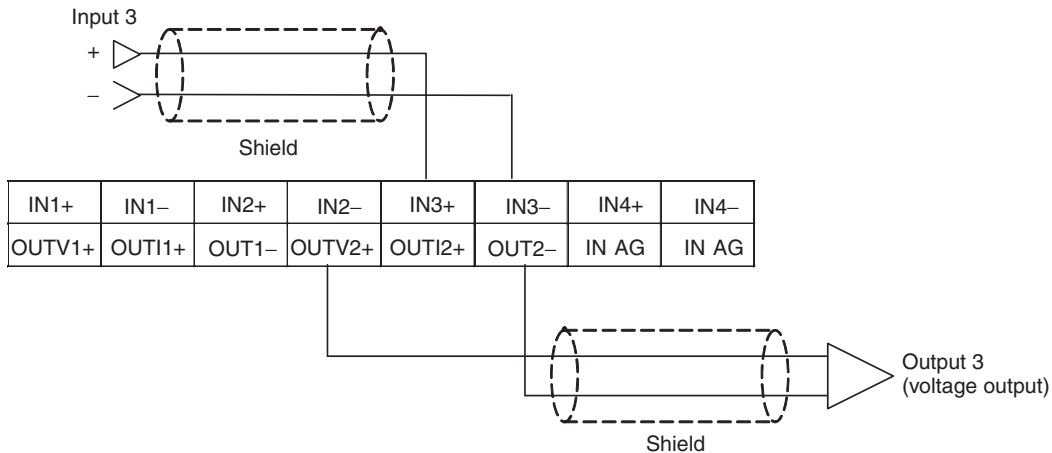
Analog Output Terminal Block



Pin	Function
9	OUT V1+
10	OUT I1+
11	OUT1-
12	OUT V2+
13	OUT I2+
14	OUT2-
15	IN AG*
16	IN AG*

Note Do not connect the shield.

Analog I/O Wiring Example



- Note**
- (1) When using a current input, turn ON voltage/current input switch pins IN1 to IN4, and make the suitable setting in the PLC Setup.
 - (2) For any inputs that are not to be used, set them to not be used by clearing the selection of the Use checkbox.
If an input that is set to be used is not actually used, the data for that input may be unstable. If that occurs, the instability can be removed by short-

4-3 Built-in Analog I/O Area (XA CPU Units Only)

Built-in Analog Input Bits: CIO 200 to CIO 203 (4 words)

Built-in Analog Output Bits: CIO 210 to CIO 211 (2 words)

The built-in analog inputs and built-in analog outputs for XA CPU Units are always allocated words between CIO 200 and CIO 211.

Data	Allocated words	Description		
		Data	1/6000 resolution	1/12000 resolution
Analog input A/D conversion data	CIO 200	Analog input 0	-10 to 10 V: F448 to 0BB8 hex Other ranges: 0000 to 1770 hex	-10 to 10 V: E890 to 1770 hex Other ranges: 0000 to 2EE0 hex
	CIO 201	Analog input 1		
	CIO 202	Analog input 2		
	CIO 203	Analog input 3		
Analog output D/A conversion data	CIO 210	Analog output 0		
	CIO 211	Analog output 1		

The Analog I/O Area will be cleared at the following times:

1. When the operating mode is changed between PROGRAM and RUN or MONITOR mode (See note.)
2. When the power is cycled
3. When analog I/O memory is cleared from the CX-Programmer
4. When operation fails due to a fatal error other than one created by executing a FALS(007) instruction (Memory will be retained if operation fails due to execution of a FALS(007) instruction.)

Note The built-in analog outputs will operate as follows when the operating mode is switched between RUN or MONITOR mode and PROGRAM mode:

I/O Memory Hold Bit (A500.12)	Operation
OFF	The analog output values in the words allocated in memory will be cleared and the 0000 hex will be output for the output refresh.
ON	The analog output values in the words allocated in memory will retain their values from right before the operating mode was changed and the previous values will be output for the output refresh.

Note Control of the built-in analog outputs will temporarily stop when Memory Cassette data is being transferred or verified. Therefore, if the operating mode is switched between PROGRAM and RUN or MONITOR mode when the built-in analog output is being used and the I/O Memory Hold Bit is set to ON to retain analog values output externally, the values will change; the analog values output externally will not be retained while Memory Cassette data is being transferred or verified. The analog output values will return to the original retained values when the transfer or verification has been completed.