EIP-2017 Quick Start

For EIP-2000 Series

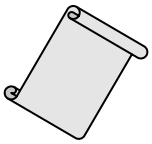
English/ January 2014/ Version 1.2

1 What's in the shipping package?

The package includes the following items:

EIP-2017

CD



Quick Start
(This Document)

Screw Driver

2 Installing Software on your PC

- **Install EIP-2000 Utility:**

  The software is located at:
  Fieldbus_CD:\EtherNetIP\remote-io\EIP-2017\Utility

3 Connecting the Power and PC

1. Make sure your PC has workable network settings.
2. Disable or well configure your Windows firewall and anti-virus firewall first, else the **"Network Scan"** on step 4 may not work. (Please contact with your system Administrator)
3. Check FW/OP DIP switch if it is on **OP** position(Figure 3-1).

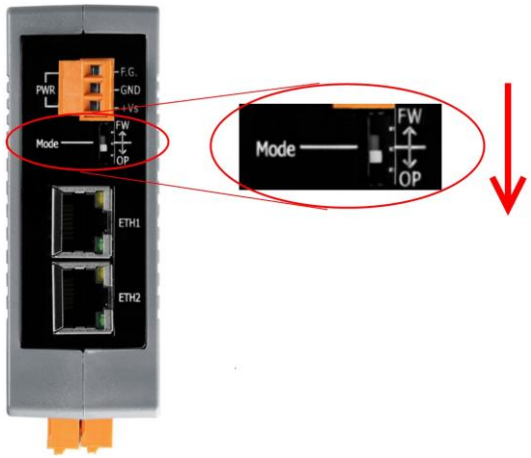


Figure 3-1 Mode Switch

4. Connect both the EIP-2000 and your computer to the same sub network or the same Ethernet switch, and power the EIP-2000 on. Please refer to figure 3-2.

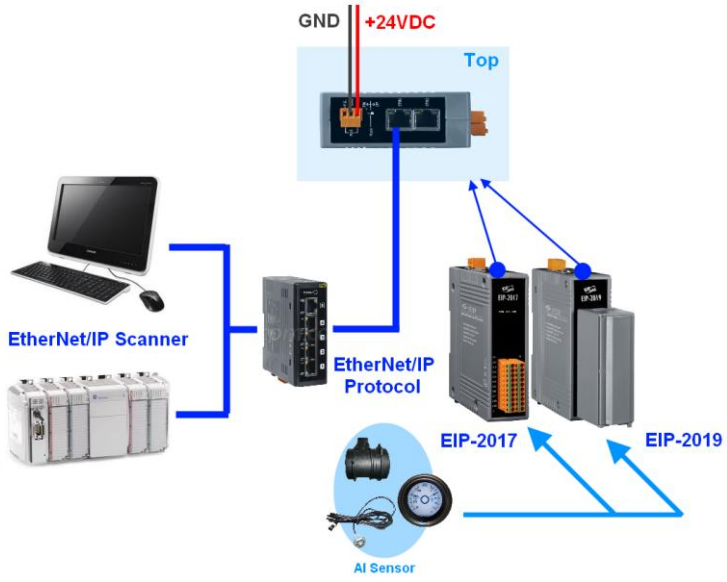
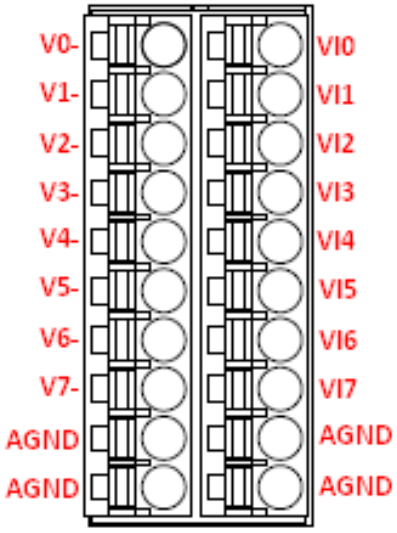


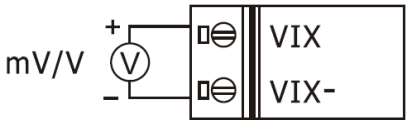
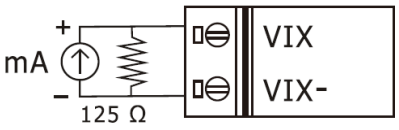
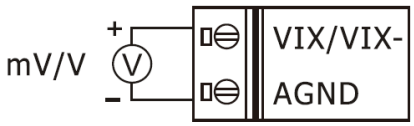
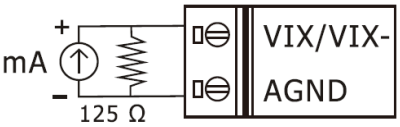
Figure 3-2 EIP-2000 module installation

5. I/O connector – EIP-2017

20-pin Spring-type terminal connecter			
Pin	Description	Pin	Description
1	V0-	2	VI0
3	V1-	4	VI1
5	V2-	6	VI2
7	V3-	8	VI3
9	V4-	10	VI4
11	V5-	12	VI5
13	V6-	14	VI6
15	V7-	16	VI7
17	AGND	18	AGND
19	AGND	20	AGND



6. I/O Wire Connection

AI	Voltage Input Wiring	Current Input Wiring
DIFF.		
S.E.		

4 Using the EIP-2000 Utility

1. Double click the **"EIP-2000 Utility"** shortcut on the desktop.

2. Click the "Network Scan" button to search your EIP-2000 modules(Figure 4-1).

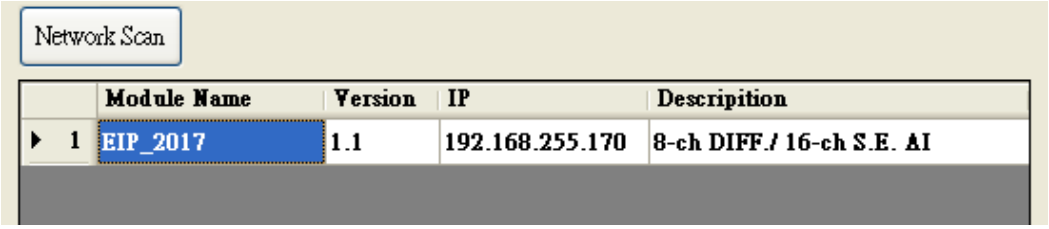


Figure 4-1 EIP-2000 Utility network scan

3. Click the **EIP-2017 or other EIP-2000 modules** on the device list below to open the configuration dialog of **EIP-2000**. Each EIP-2000 module has its own configuration interface. Please refer to Figure 4-2.

   (1) In the **"Analog Input Status"**, users can select AI type of every channel.

   (2) In the **"AI Parameters"**, users can select the AI filters and AI representations here. There are two different AI filters 50Hz and 60Hz. The selection of filters must correspond with the frequency of AI sensors. Users have to check what are the requirements of AI sensors. We provide two AI representations engineer and hex. If users change the AI representation, all AI status will become to it.

   (3) If the network settings have been changed, please click the **"Update Network Settings"** button to update the configuration and reboot the module.

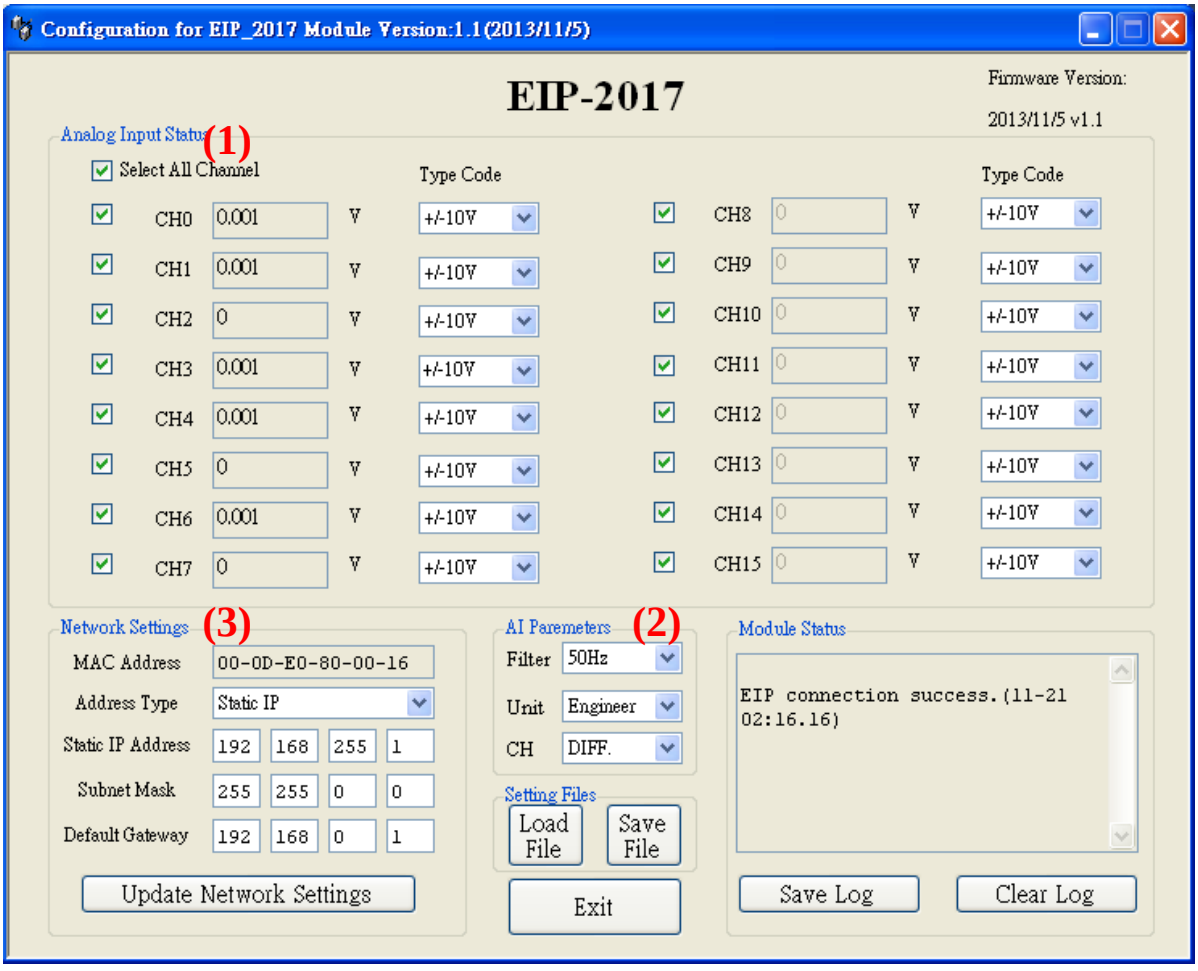


Figure 4-2 EIP-2000 Utility configurations

4. Configuration settings of EIP-2000

Table 4-1 Network Settings

Network Settings	
Item	**Settings (default)**
IP	192.168.255.1
Gateway	192.168.0.1
Mask	255.255.0.0
For configuration of the **Address Type**, **Static IP Address**, **Subnet Mask** and **Default Gateway** of the EIP-2000. Please refer to section "**4.2.1 Network Settings**"	

Table 4-2 LED Indicator

LED Indicator		
LED	**LED Status**	**Description**
Power LED	Always On	Module is in Run mode.
	Flashing	Module is in Init mode.
Status LED	Always On	EtherNet/IP connection is failed.
	Blink per second	EtherNet/IP connection is successful.
	Blink per 300 ms	EtherNet/IP disconnected during communication but still in Safe-Delay time.
	Blink per 100 ms	Module is about to reboot.
Error LED	On/Flashing	AI status is close to full or out of range.
	Off	AI status is within the range of input type.

5 How to connect with Allen-Bradley PLC ?

1. Open RSLogix 5000 and create a new project.

Figure5-1. Create a new project.

2. Select the PLC type and give the project a name.

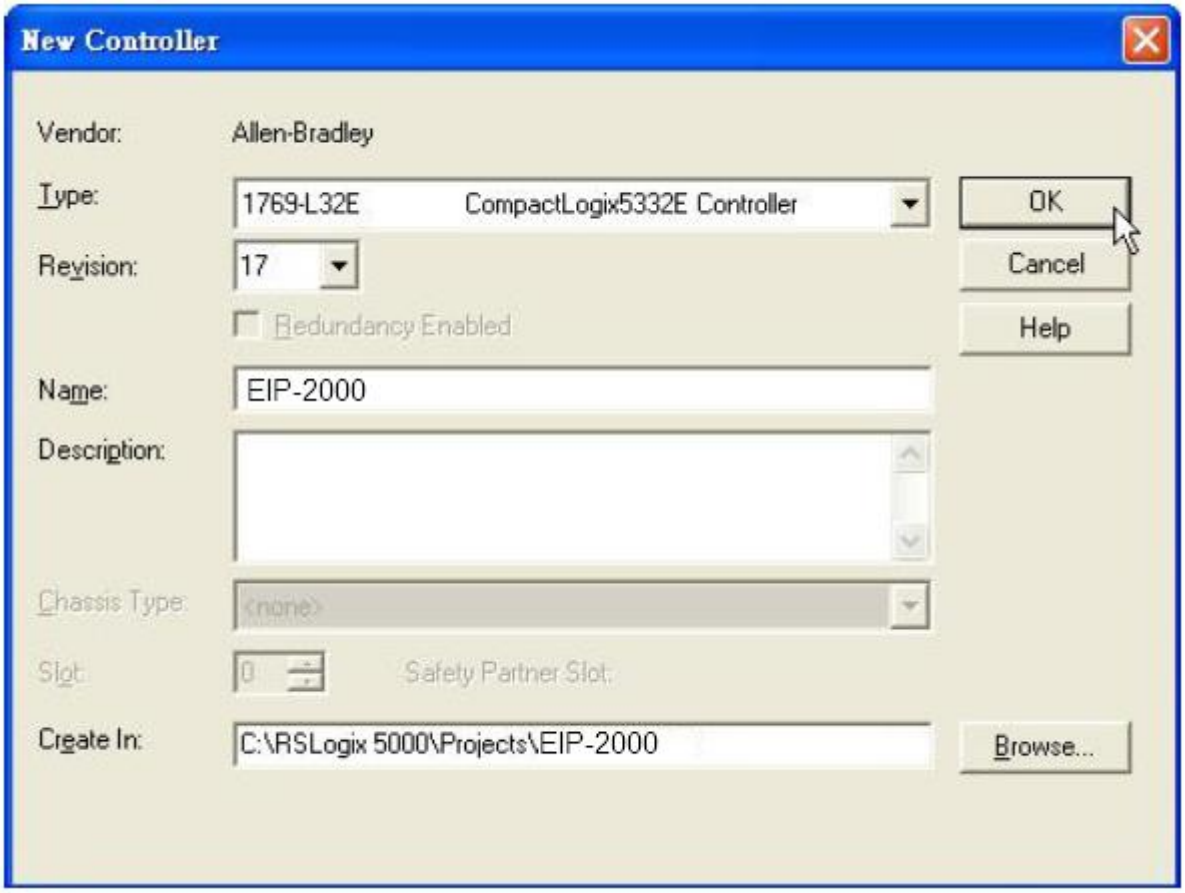


Figure5-2. Set the PLC type and project name.

3. Create a new module in the “Ethernet” item.

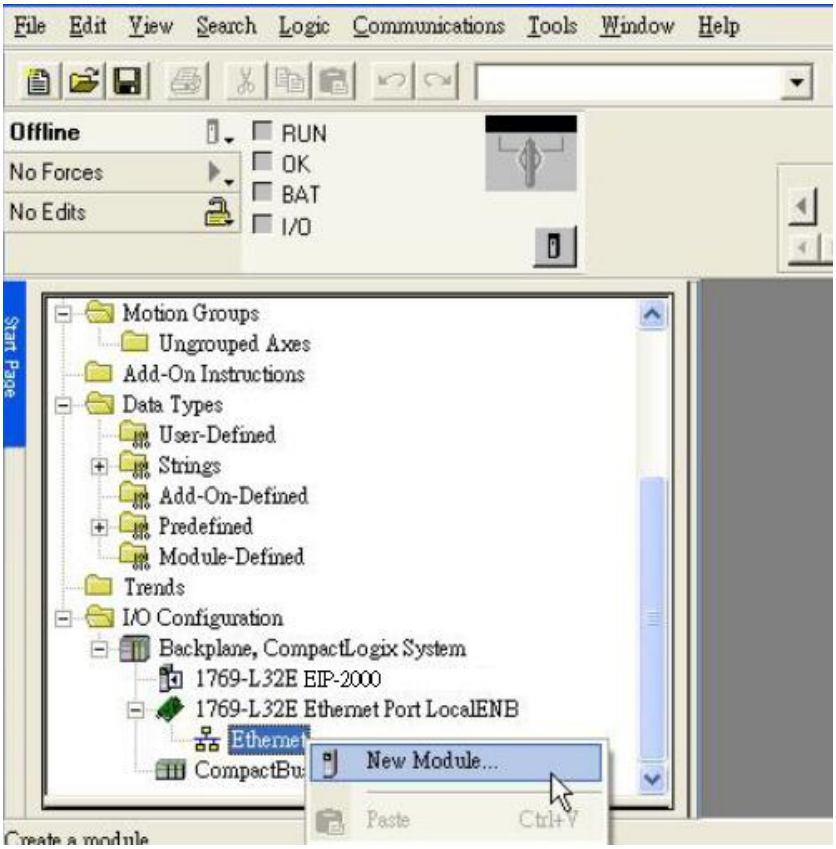


Figure 5-3. Create a new module.

4. Select the “ETHERNET-MODULE” below “Communications” in the Select Module window.

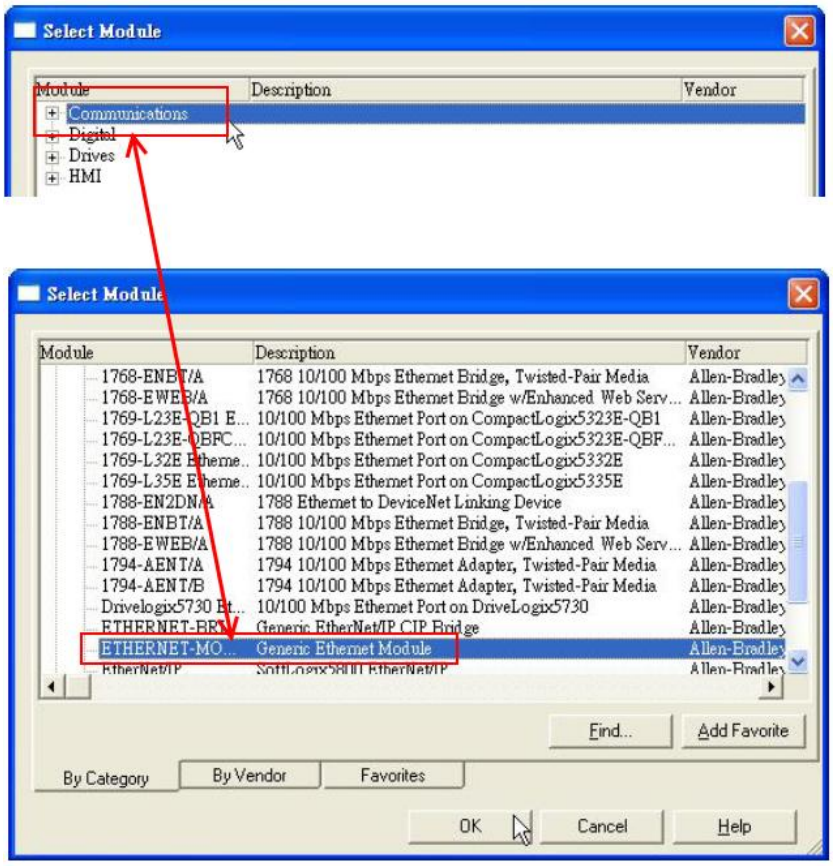


Figure5-4. Select “ETHERNET-MODULE”.

5. Configure the new module parameters. The I/O length of new module must be the same with the length of EIP-2017 I/O data(Table 5-1). The input data size is 53 bytes and output data size is 22 bytes. The instance ID please refer to Table 5-2.

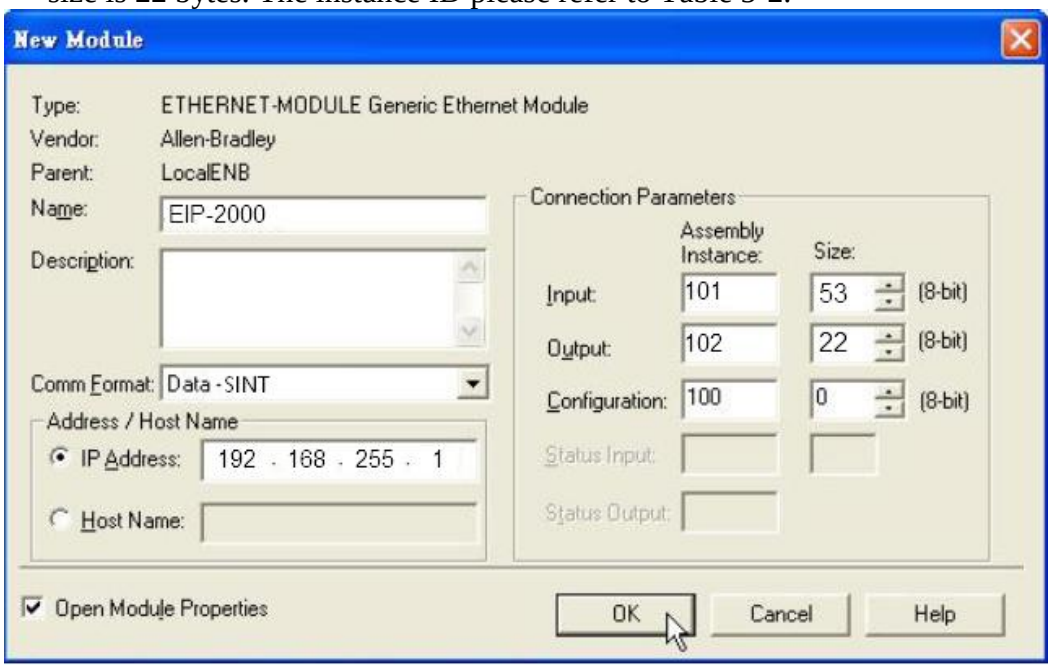


Figure5-5. The settings of EIP-2017 module

Table 5-1. Data Assembly of EIP-2017

Data Assembly	Byte count	Description
Input Assembly	53	1st ~ 16th Byte: AI status (AI0~AI7) for DIFF. or S.E. mode.
		17th ~ 32nd Byte: AI status (AI8~AI15) for S.E. mode only.
		33rd~40th Byte: AI Type Code (AI0~AI7) for DIFF. or S.E. mode.
		41st~48th Byte: AI Type Code (AI0~AI7) for S.E. mode only.
		49th Byte: AI filters status.
		50th Byte: Channel mode status.
		51st Byte: AI representation.
		52nd Byte: Channel selection (AI0~AI7).
		53rd Byte: Channel selection (AI8~AI15).
Output Assembly	22	1st Byte: Set value to the module.
		2nd ~ 17th Byte: Set type code to AI0~AI15.
		18th Byte: Filter selections of AI
		19th Byte: Channel mode selection DIFF. or S.E.
		20th Byte: AI representations
		21st Byte: AI channel selection (AI0 ~ AI7)
		22nd Byte: AI channel selection (AI8 ~ AI15)

Table 5-2. Instance ID table of EIP-2000

Implicit Message Information of EIP-2000		
Instance	**Instance ID**	**Data length**
Input(T->O)	65_{hex}(101)	Depends on modules. e.g.53
Out(O->T)	66_{hex}(102)	Depends on modules. e.g.22
Configuration	64_{hex}(100)	