PISO-CPM100

Quick Start User Guide

1. Introduction

This user guide introduces how to apply the PISO-CPM100 into users' application quickly and easily. Therefore, it only provides the basic instructions. For more detail information about the driver, please refer to the PISO-CPM100 user manual in the product CD:

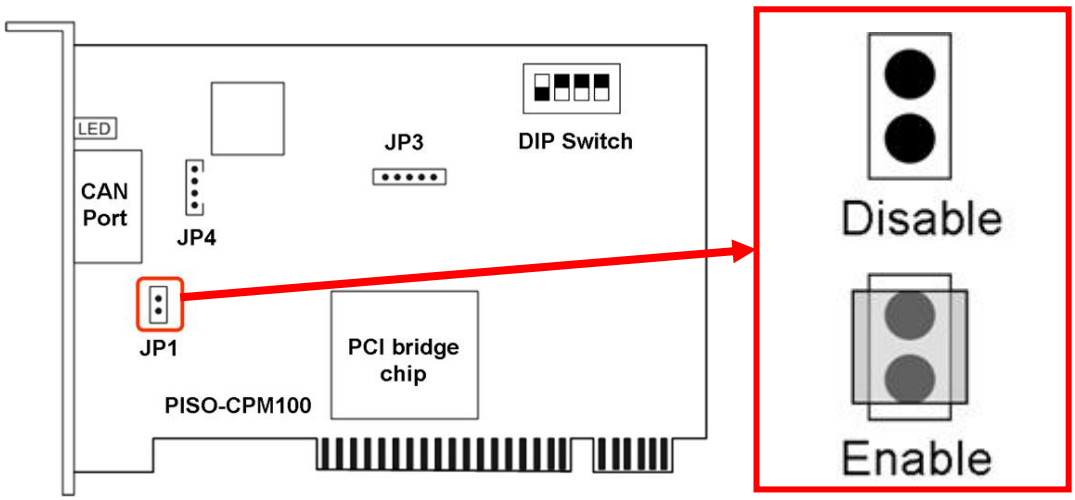
fieldbus_cd://canopen/master/piso-cpm100/

Or download it from the following web site:

http://www.icpdas.com/products/Remote_IO/can_bus/piso-cpm100.htm

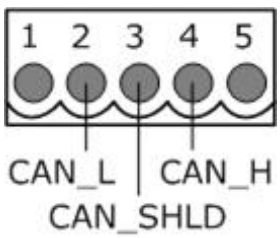
2. Hardware Configuration

2.1 Terminal Resister Setting



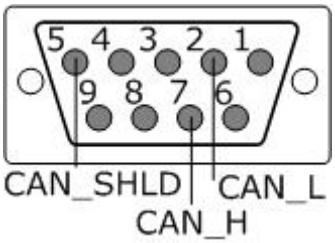
2.2 Pin Assignment

- **5-pin screw terminal connector**



Pin No.	Signal	Description
1	N/A	No use
2	CAN_L	Dominant Low CAN bus line
3	CAN_SHLD	Optional CAN shield
4	CAN_H	Dominant High CAN bus line
5	N/A	No use

- **9-pin D-sub female connector**



Pin No.	Signal	Description
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2	CAN_L	Dominant Low CAN bus line
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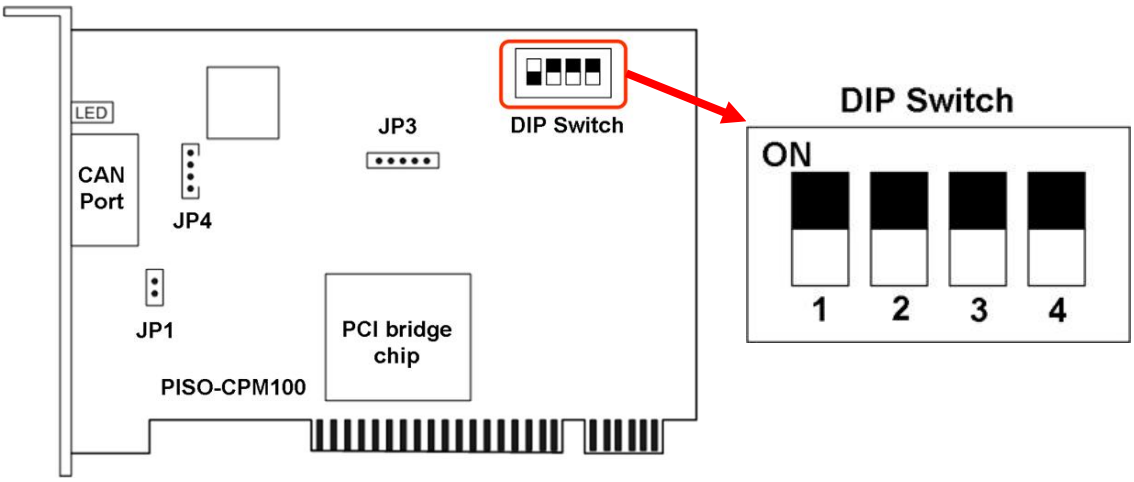
4	N/A	No use
5	CAN_SHLD	Optional CAN Shield
6	N/A	No use
7	CAN_H	Dominant High CAN bus line
8	N/A	No use
9	N/A	No use

2.3 Set Board Number

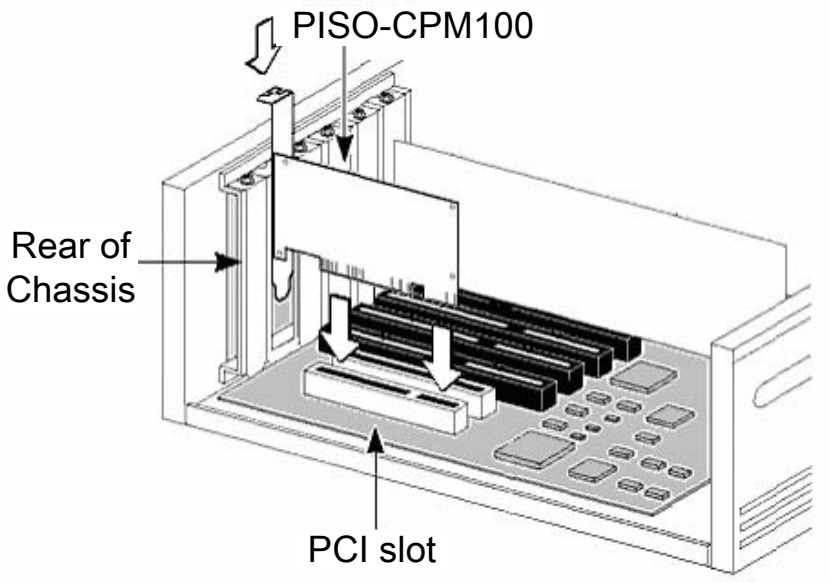


To turn the entire DIP Switch off, it means that set the board number of PISO-CPM100 to 0.

2.4 Indicator LED

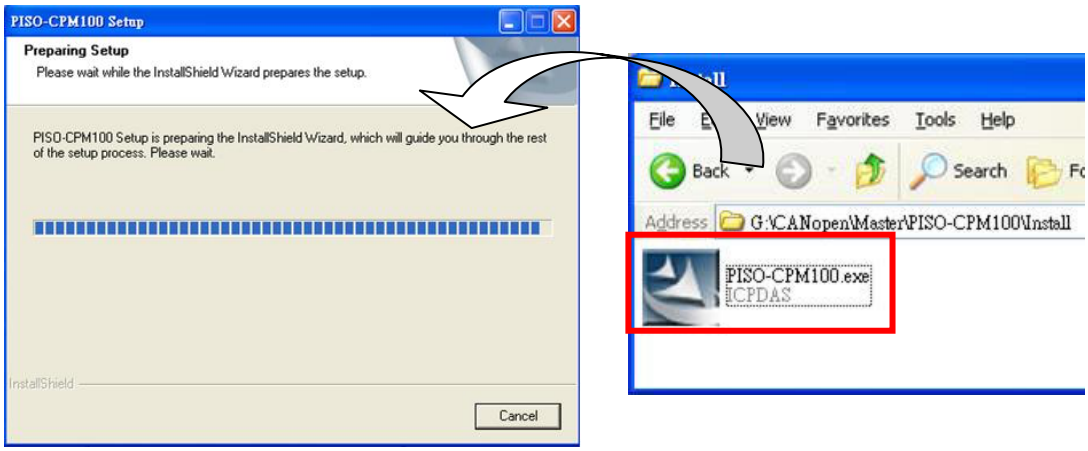
LED	Status	Description
Green	Off	No data
	On	Some data is transmitted or received
Red	Off	No error
	On	Some error has occurred. Use the CPM100_GetCANStatus function to get the error status

2.5 Hardware Installation



3. Software Installation

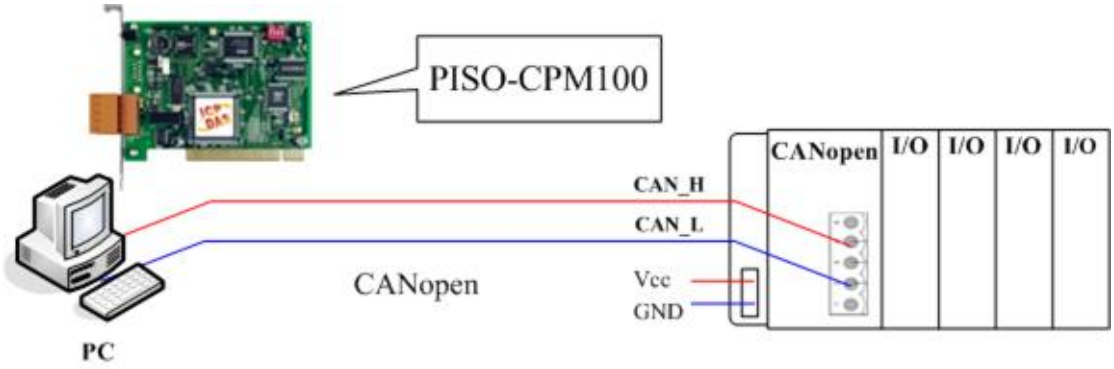
The driver of PISO-CPM100 can be used in 98/Me/NT/2K/XP Windows environments. Users can find the driver in the path of /canopen/master/piso-cpm100/ in the Fieldbus_CD. Execute the PISO-CPM100.exe file to start install the driver below.



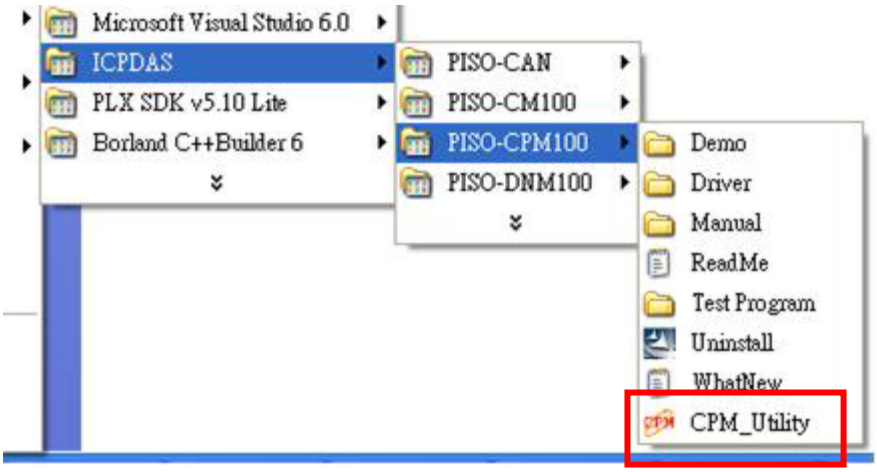
4. Getting Start

The section will teach users how to control the I/O of CANopen slave with CPM_Utility step by step. But before following the steps below, users need to prepare some hardware including a PISO-CPM100, and a CANopen slave device.

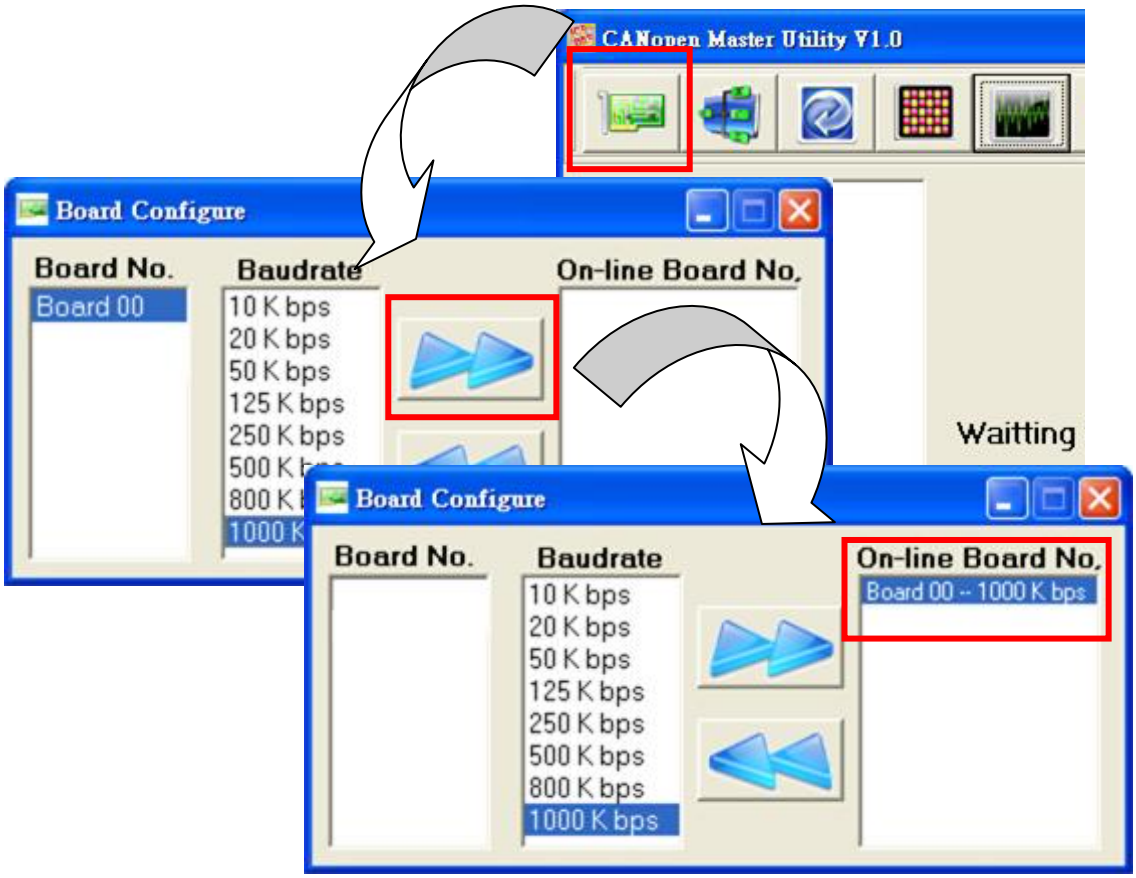
Step 1: Plugged PISO-CPM100 in PCI slot of PC and connect the CAN port of PISO-CPM100 with the CAN port of CANopen slave device. The node ID of slave device is set to 1, and the baud rate is set to 1000Mbps. About the setting method of the node id and the baud rate of the CANopen slave, please refer to the slave's user_manual.



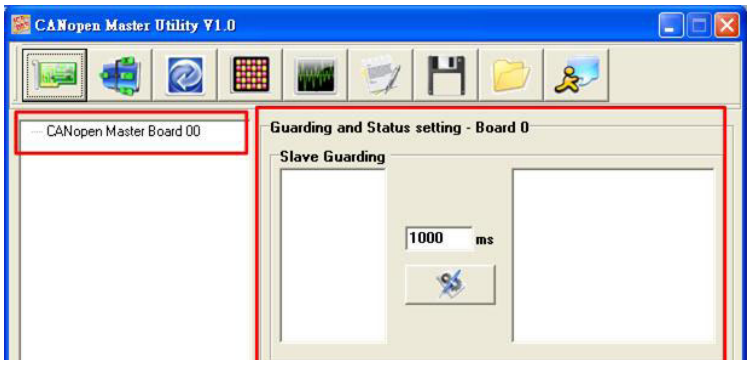
Step 2: After install the PISO-CPM100 driver, the folder of PISO-CPM100 will be installed as follows. Please execute the CPM_Utility.exe on PC in the path of "start manual→all programs→ICPDAS→PISO-CPM100" to start the quick start demo test.



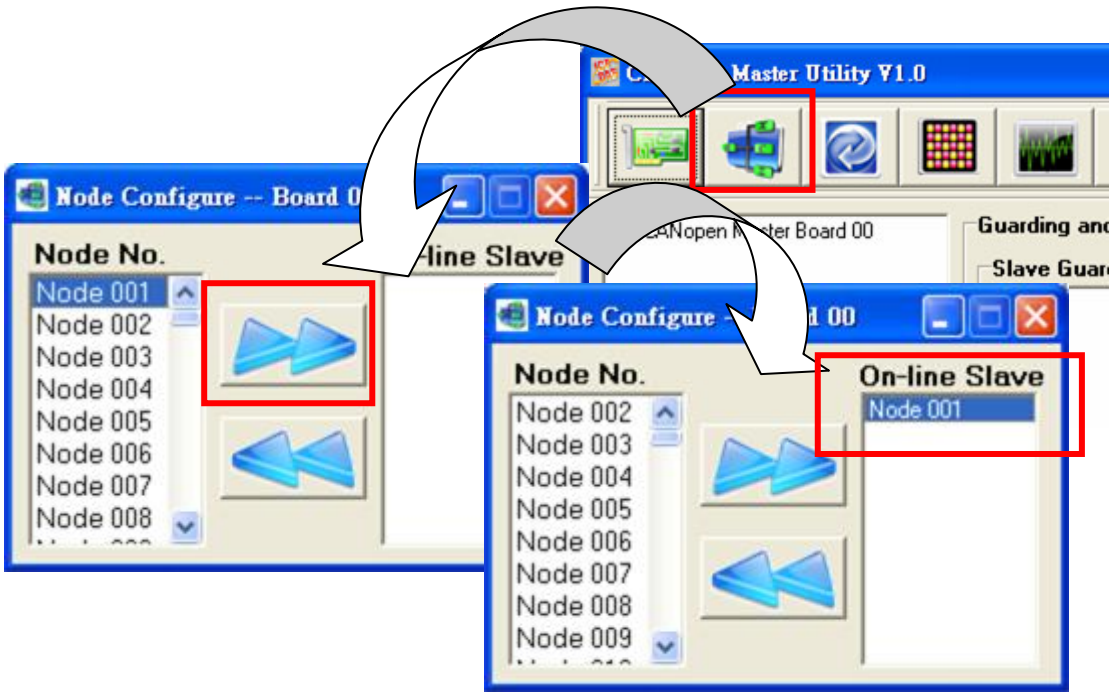
Step 3: Click the “Board Configure” button to select the “Board 00” and the baud “1000K bps”. And then click the “Add” button to active the PISO-CPM100 below.



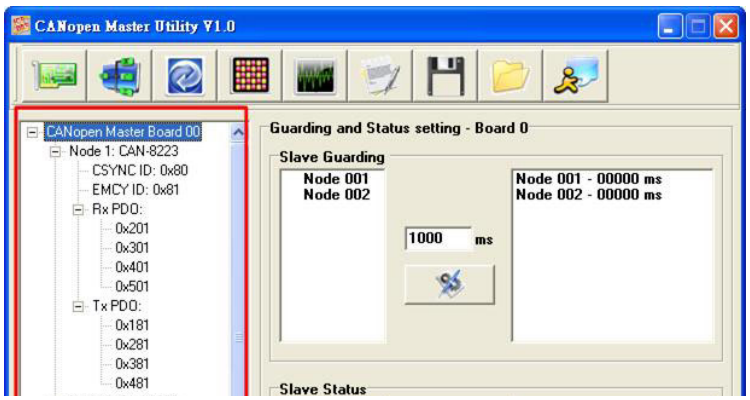
Step 4: After the board 0 is activated successfully. The string “CANopen Master Board 00” will be show on the tree view of the left hand.



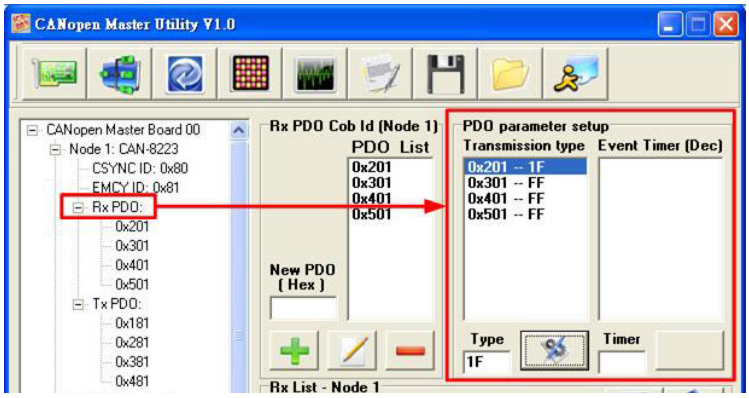
Step 5: Click the “Node Configure” button and select the “Node 001” (because the node of CANopen slave is set to 1). Then click the “Add” button to add the CANopen slave device with node ID 1. If there are other slaves on the CANopen network, users also can add them into the node list.



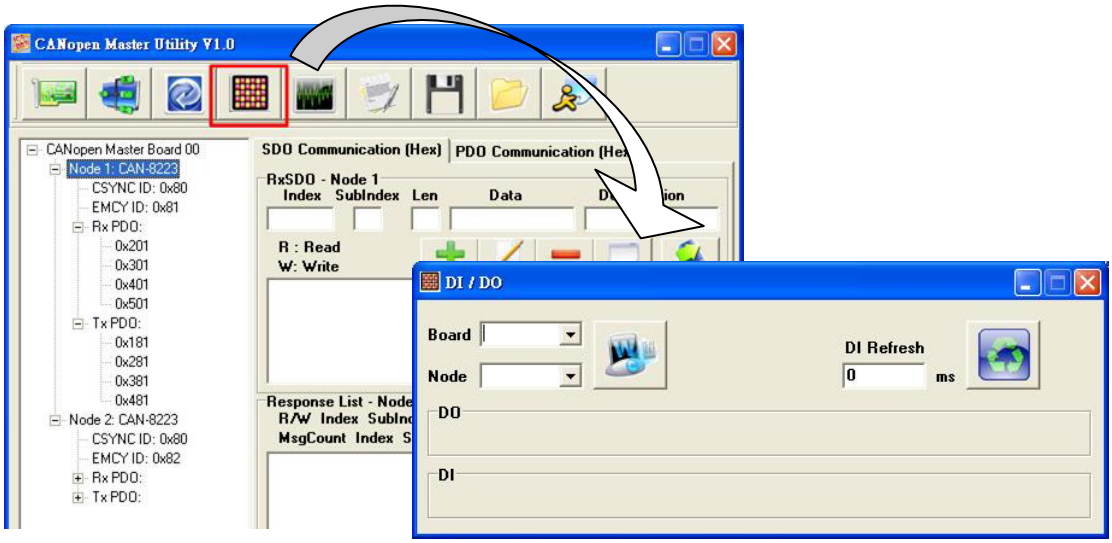
Step 6: After the slave node id 1 is added successfully. The data list about the CANopen slave device will be show on the tree view of the left hand.



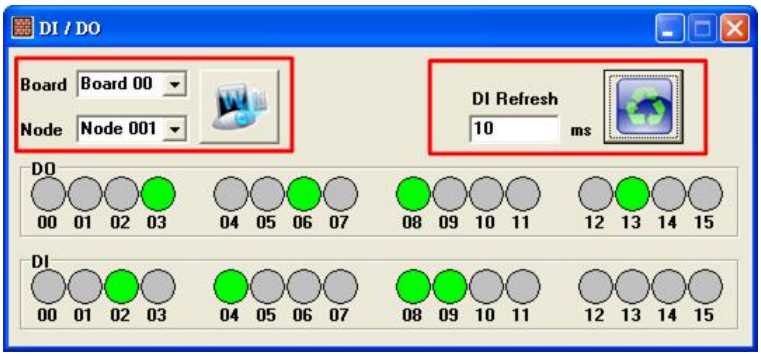
Step 7: There are many functions listed on the tree view. Users can according to what to do to select them to use. For example, if users want to use the RxPDO protocol of CANopen communication, users can select the “RxPDO” folder, and all the functions about the RxPDO are in it.



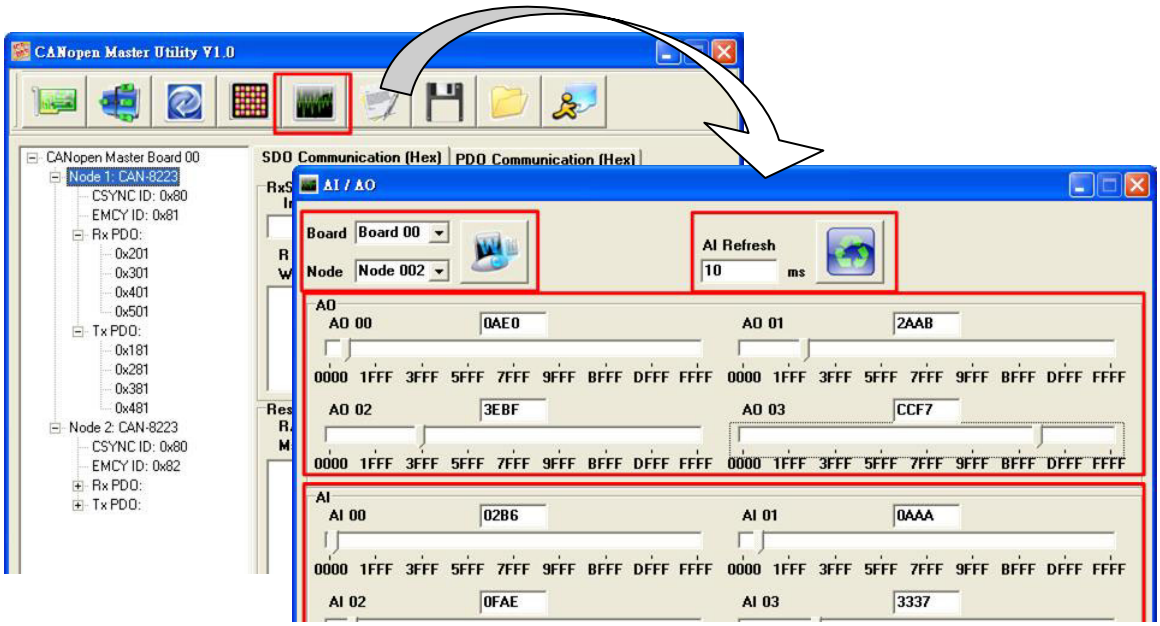
Step 8: Click the “DI/DO Control” button, then select the board number and slave number, and click the “Show I/O Status” button. The CPM_Utility would show the status of the DI/DO that on the slave.



Step 9: Set the “DI Refresh Timer” to poll the DI status, and click the DO LED to output the DO data.



Step 10: Click the “AI/AO Control” button, then select the board number and slave number, and click the “Show I/O Status” button. The CPM_Utility would show the status of the AI/AO that on the slave.



Step 11: Set the “AI Refresh Timer” to poll the AI status, and drag the AO scroll bar to output the AO data.

Note:

This quick start manual only teaches users how to connect with the CANopen slave and control the I/O easily and quickly. For more detail function please refer to the PISO-CPM100_user_manual.