Weintek Remote IO (CANopen)

Supported series: Weintek Remote IO (iR-COP)
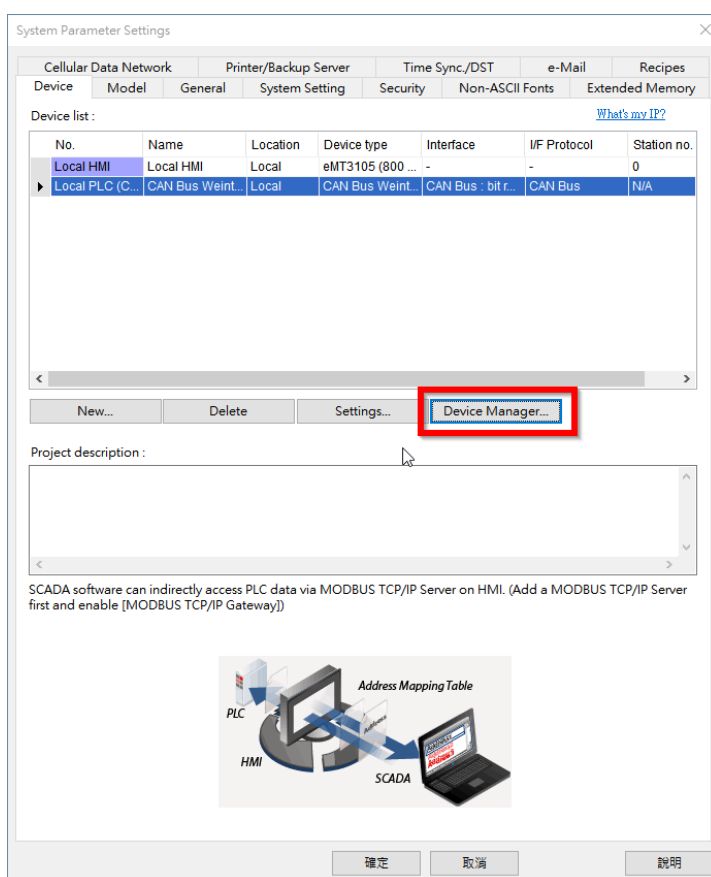
HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Weintek Remote IO (CANopen)		
Baud rate	250K	10K~1M	

Online simulator	NO	Extend address mode	NO

Device Setting:

1. Launch EasyBuilder Pro and add **Weintek Remote I/O (CANopen)** driver into the device list, Click **[Device Manager]** to configure CANopen device and addresses.

2. In Device Manager window, a Weintek Remote I/O CANopen device can be found by default.
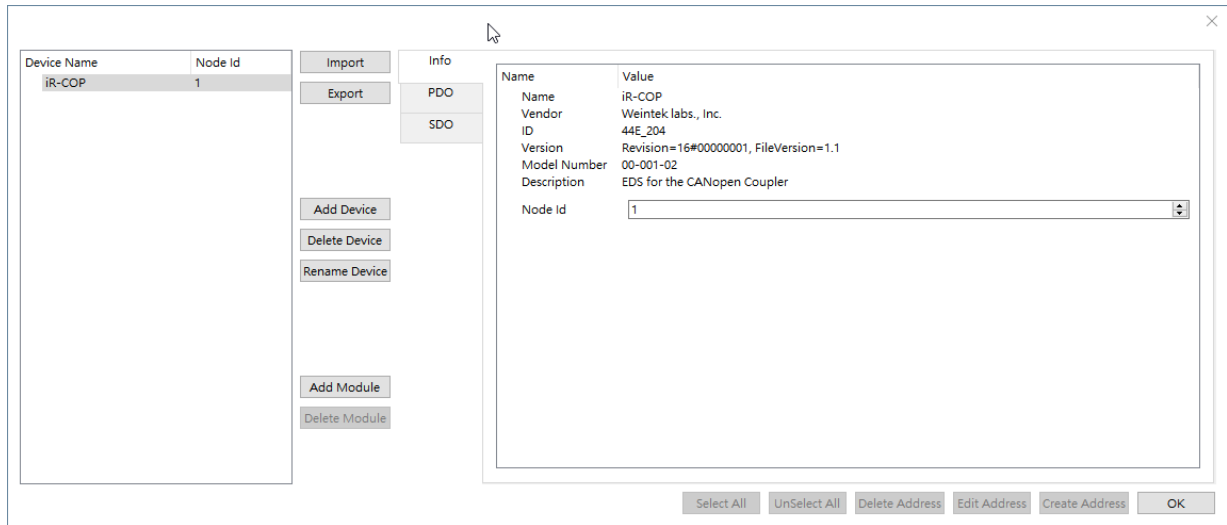
3. Clicking the buttons on the left side can:

Import: Import the predefined .wtco file into the device list. Please note that current device list will be overwritten by the imported list.

Export: Export current setting as a .wtco file for future use.

Add Device: Add a new Weintek Remote I/O CANopen device.

Delete Device: Delete the selected Weintek Remote I/O CANopen device.

Rename Device: Change device name.

Add Module: Weintek Remote I/O supports the following modules.

Item	Model	DeviceId	Describe	Type	Input Points	Output Points	Output Mode	Input Mode
1	iR-DI16-K	0x0154	16DI	DI	16	0	N/A	Source+Sink
2	iR-DM16-P	0x0351	8DI8DO_P	DI+DO	8	8	Source	Source+Sink
3	iR-DQ16-P	0x0251	16DO_P	DO	0	16	Source	N/A
4	iR-DM16-N	0x0352	8DI8DO_N	DI+DO	8	8	Sink	Source+Sink
5	iR-DQ16-N	0x0252	16DO_N	DO	0	16	Sink	N/A
6	iR-DM16-R	0x0353	8DI8DO_R	DI+DO	8	8	Relay	Source+Sink
7	iR-DQ16-R	0x0253	16DO_R	DO	0	16	Relay	N/A
8	iR-AI04-VI	0x0425	4AI	AI	4	0	N/A	Votage/Current
9	iR-AQ04-VI	0x0525	4AO	AO	0	4	Votage/Current	N/A
10	iR-AM06-VI	0x0635	4AI2AO	AI+AO	4	2	Votage/Current	Votage/Current
11	iR-AI04-TR	0x0426	RTDTC	RTD/TC	4	0	N/A	RTD/TC

Adding modules can show address information correctly.

Delete Module: Delete the selected module.

Tags

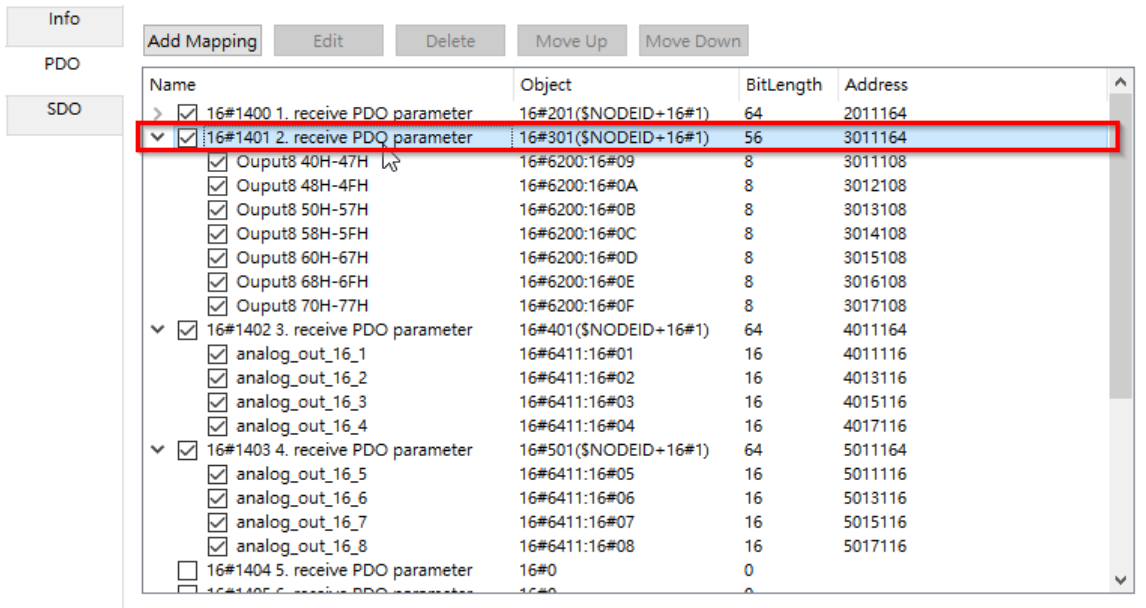**Info**: Shows device information. Node ID can be changed within 1~127.

PDO (Process Data Object): This tab displays **TxPDO** and **RxPDO** Mapping for editing. Please note that changes in PDO tab will not be updated to Remote I/O. The purpose of editing PDO Mapping here is to ensure correct bit length when importing addresses to HMI, and that the displayed address names on HMI match those used in CANopen.

The five buttons at the top of the PDO tab can:

- **Add Mapping:** When the PDO object's bit length is less than 64, the user can add PDO Mapping into the list.

Select source of Mapping Object.

- **Edit:** Change the source of the selected Mapping Object.
- **Delete:** Delete the selected Mapping Object.
- **Move Up:** Move the selected Mapping Object one row upward.
- **Move Down:** Move the selected Mapping Object one row downward.

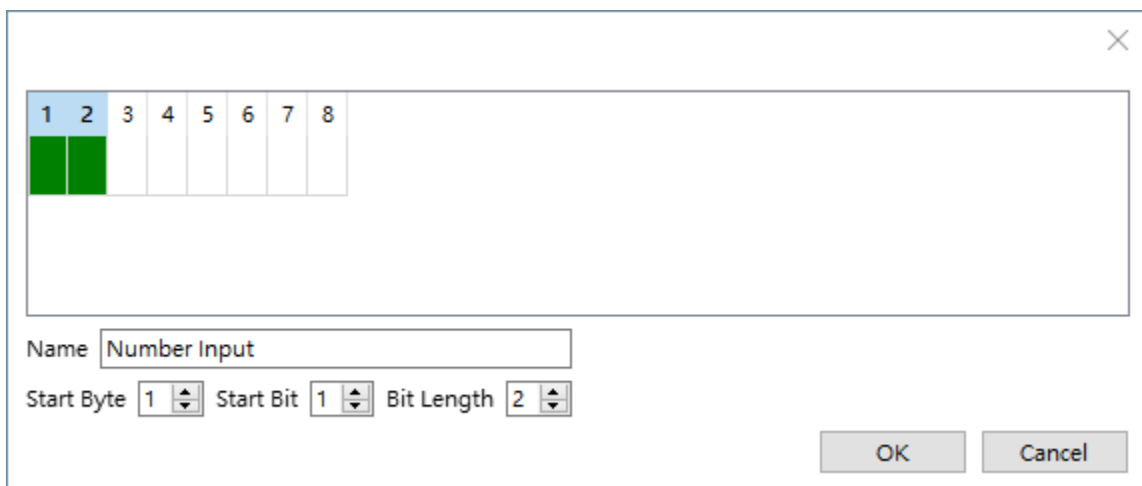**SDO (Service Data Object):** Displays all items in Object Dictionary.

Selecting and Defining Addresses

Users can define address range of the existing items.

For example, to add a user-defined address range under item **[6000] read digital input 8-bit #01** in SDO tab, select the item in the index tree and then click [Create Address].
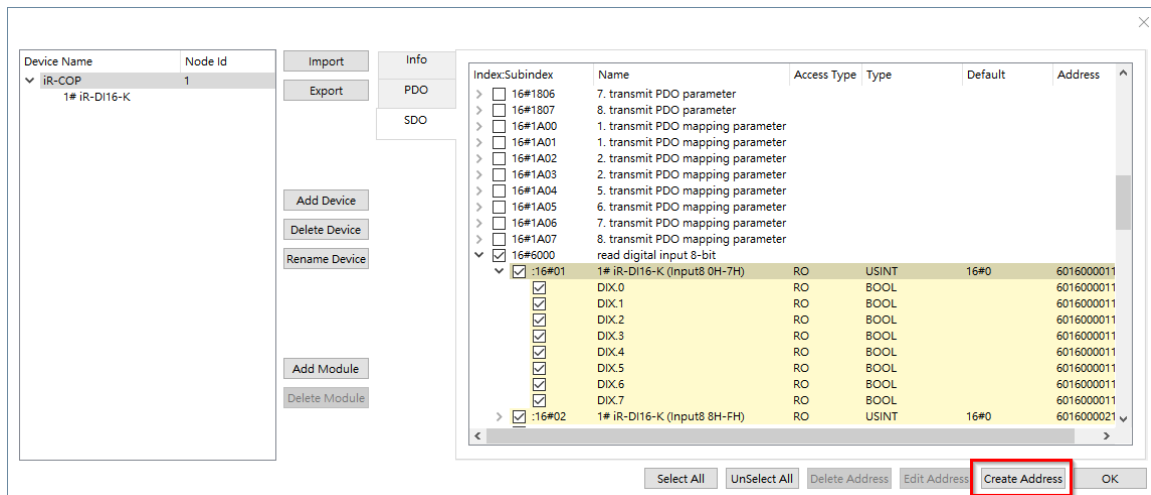
A dialog box pops up for defining address range. Using the same settings below will add a **Number Input** tag under item **[6000] read digital input 8-bit #01**.The tag will use bit 1~2 of the item as its value. That is, if the value in the item is 15, the value in the tag will be 3.

The buttons at the bottom of both SDO and PDO tab can:

- **Select All**: Select all items.
- **Unselect All:** Unselect all items.
- **Delete Address:** Delete user-defined address.
- **Edit Address:** Edit user-defined address.
- **Create Address:** Create user-defined address.
- **OK:** Import addresses.

Device Address:

Bit/Word	Device type	Format	Range	Memo
W	SDO_DATA	HHHIIIISS BbNN	1101~FFFF FFFFF8801	H: Can ID I: Index S: SubIndex B: Byte position (1~8) b: bit start position (1~8) NN: bit no. (1~64)
W	PDO_DATA	HHHHHH HHBbNN	1101~1FFF FFFF8801	H: Can ID B: Byte position (1~8) b: bit start position (1~8) NN: bit no. (1~64)
B	PDO_DATA_Bit	HHHHHH HHBb	11~1FFFFF FF88	H: Can ID B: Byte position (1~8) b: bit start position (1~8)
B	SDO_DATA_Bit	HHHIIIISS Bb	11~FFFFFF FFF88	H: Can ID I: Index S: SubIndex B: Byte position (1~8) b: bit start position (1~8)
B	SEND_NMT	D	0	Set on sends NMT Command , it will automatically return to off.

Wiring Diagram:

Diagram 1
CAN BUS

The serial port pin assignments may vary between HMI models, please click the following link for more information.

HMI		PLC
Link		CAN Bus Device
CAN_L	←→	CAN_L
CAN_H	←→	CAN_H
GND	←→	GND
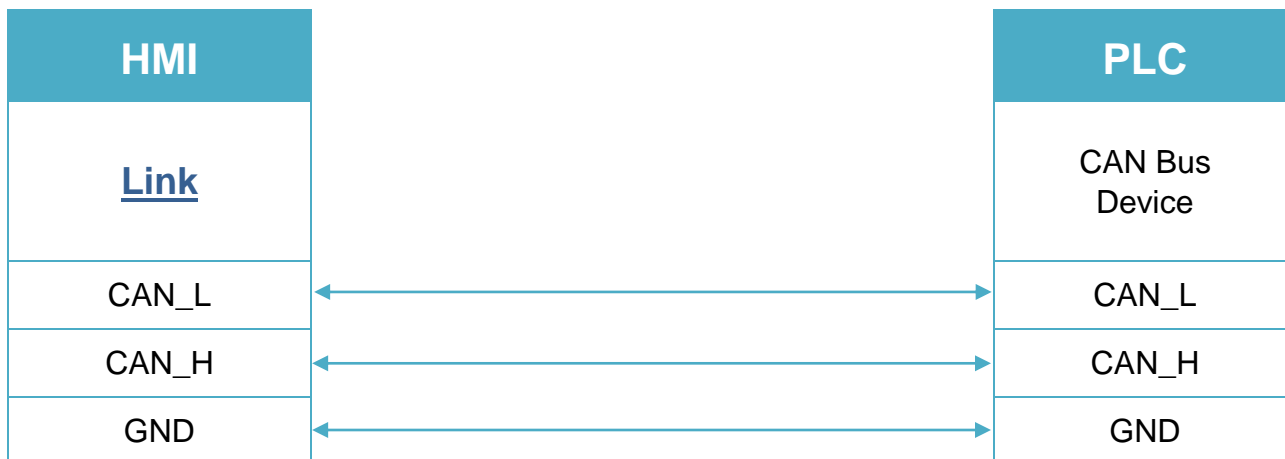
To minimize signal reflection on the CAN bus network, termination resistors should be installed at both ends of the network, as shown in the following figure. (eMT3070A has built-in termination resistor, so it is not required for eMT3070A)