

# CAN Bus CANopen Slave

Supported series: CAN Bus 2.0a / CAN Bus 2.0B device.

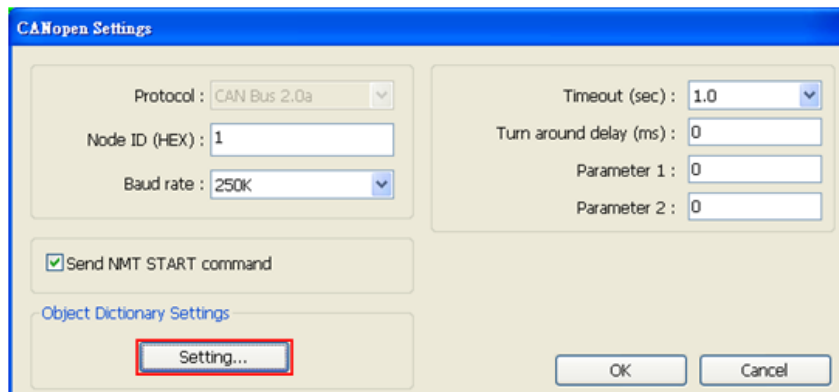
## HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	CAN Bus CANopen Slave		
Node ID	1	1~127	
Baud rate	250K	20K~1M	
RPDO command with 8 byte			
Send NMT START Command		Use default command Use user-defind command	

Online simulator	NO	Extend address mode	NO
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Follow the steps to import EDS file.

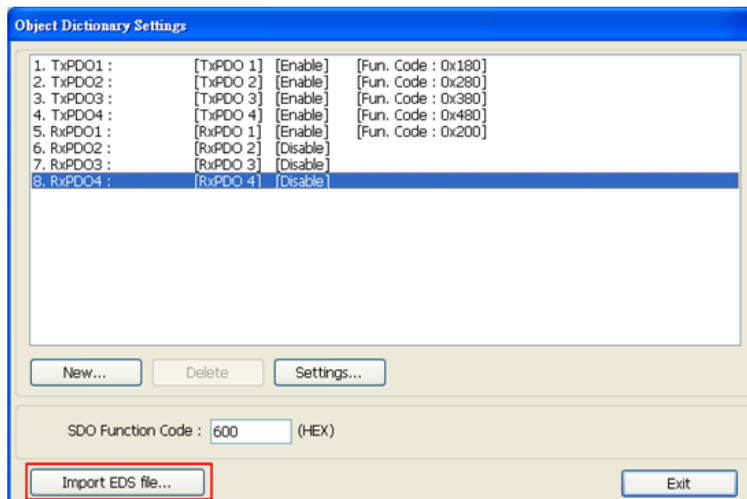
Step 1. Object Dictionary Settings -> Setting



The CANopen Settings dialog box is shown. It has a blue title bar and a light beige background. The settings are as follows:

- Protocol: CAN Bus 2.0a (dropdown)
- Node ID (HEX): 1 (text box)
- Baud rate: 250K (dropdown)
- Timeout (sec): 1.0 (dropdown)
- Turn around delay (ms): 0 (text box)
- Parameter 1: 0 (text box)
- Parameter 2: 0 (text box)
- ☒ Send NMT START command
- Object Dictionary Settings section with a "Setting..." button highlighted by a red rectangle.
- OK and Cancel buttons at the bottom right.

Step 2. Import EDS file.

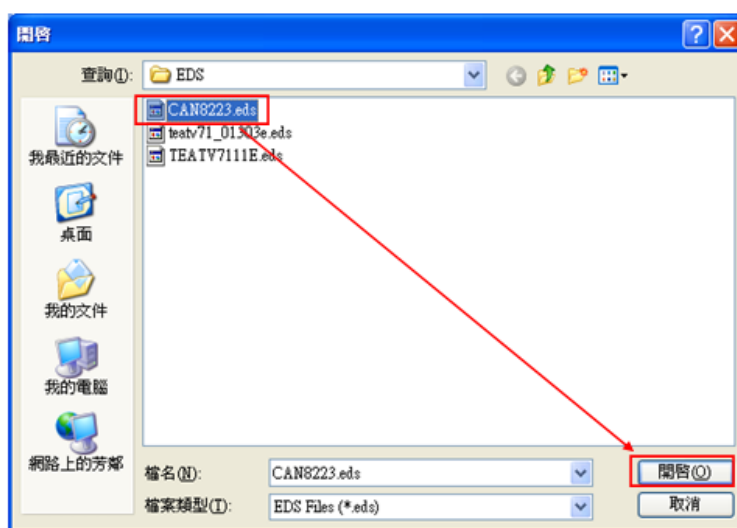


The Object Dictionary Settings dialog box is shown. It has a blue title bar and a light beige background. The settings are as follows:

- A list of object dictionary entries:
 

Index	Object Name	Value	Access	Function Code
1	TxPDO1	[TxPDO 1]	[Enable]	[Fun. Code : 0x180]
2	TxPDO2	[TxPDO 2]	[Enable]	[Fun. Code : 0x280]
3	TxPDO3	[TxPDO 3]	[Enable]	[Fun. Code : 0x380]
4	TxPDO4	[TxPDO 4]	[Enable]	[Fun. Code : 0x480]
5	RxPDO1	[RxPDO 1]	[Enable]	[Fun. Code : 0x200]
6	RxPDO2	[RxPDO 2]	[Disable]	
7	RxPDO3	[RxPDO 3]	[Disable]	
8	RxPDO4	[RxPDO 4]	[Disable]	
- Buttons: New..., Delete, Settings...
- SDO Function Code: 600 (text box) (HEX)
- "Import EDS file..." button highlighted by a red rectangle.
- Exit button at the bottom right.

Step 3. Select the EDS file to be imported.



Step 4. Successfully import EDS file.



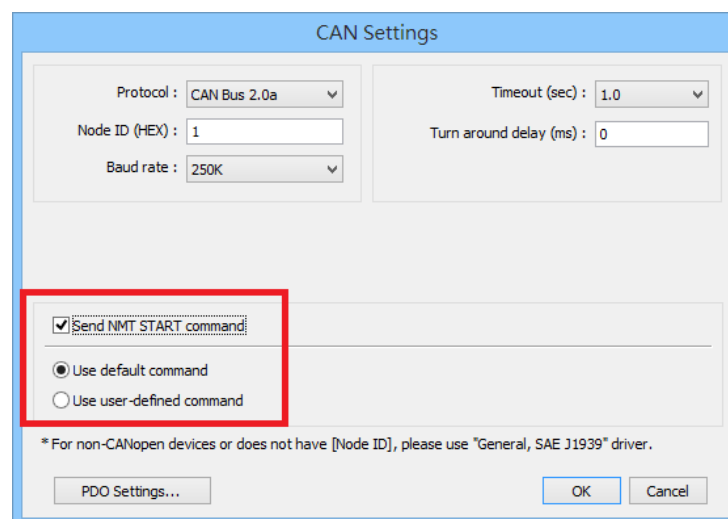
## Device Address:

Bit/Wor	Device type	Format	Range	Memo
B	TxPDOOn_BIT	Dd	0 ~ 77	D : address (unit: byte) d : bit no.
B	RxPDOOn_BIT	Dd	0 ~ 77	D : address (unit: byte) d : bit no.
B	SDO_8bit_Bit	HHHHHHHo	0 ~ FFFFFFF7	HHHH(Index)+HH(Sub-index)+o(Bit no)
B	SDO_16bit_Bit	HHHHHHHdd	0 ~ HHHHHH15	HHHH(Index)+HH(Sub-index)+dd(Bit no)
B	NMT START Command	Dd	0	*Note
W	TxPDOOn	D	0 ~ 7	

Bit/Wor	Device type	Format	Range	Memo
W	TxPDOOn_Byte	D	0 ~ 7	
W	RxPDOOn	D	0 ~ 7	
W	RxPDOOn_Byte	D	0 ~ 7	
W	SDO_8bit	HHHHHH	0~FFFFFF	HHHH(Index)+HH(Sub-index)
W	SDO_16bit	HHHHHH	0~FFFFFF	
W	SDO_32bit	HHHHHH	0~FFFFFF	

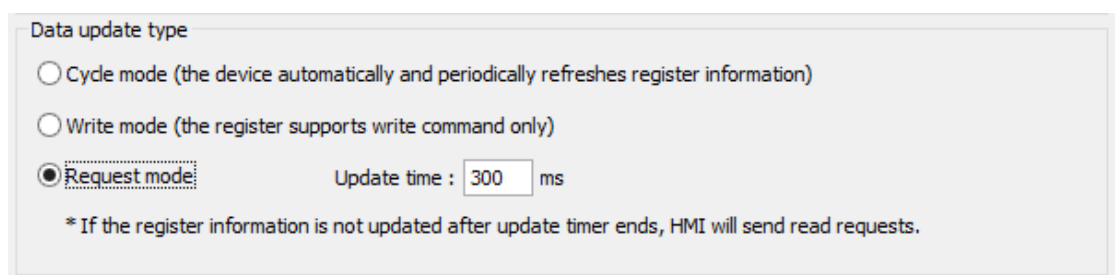
\*Note:

NMT START COMMAND will be sent when this BIT is set to ON, and will return to OFF after sending. The **[Send NMT START command]** in CAN Settings must be checked, otherwise it is invalid.



The image shows the 'CAN Settings' dialog box. It has several fields: 'Protocol' (CAN Bus 2.0a), 'Node ID (HEX)' (1), 'Baud rate' (250K), 'Timeout (sec)' (1.0), and 'Turn around delay (ms)' (0). Below these, there is a section for 'Send NMT START command' which is highlighted with a red box. This section contains three options: 'Send NMT START command' (checked), 'Use default command' (radio button), and 'Use user-defined command' (radio button). At the bottom, there is a note: '\* For non-CANopen devices or does not have [Node ID], please use "General, SAE J1939" driver.' and buttons for 'PDO Settings...', 'OK', and 'Cancel'.

When using **NMT START command** and **Request mode**, the **[Update time]** must be set to 300ms or more

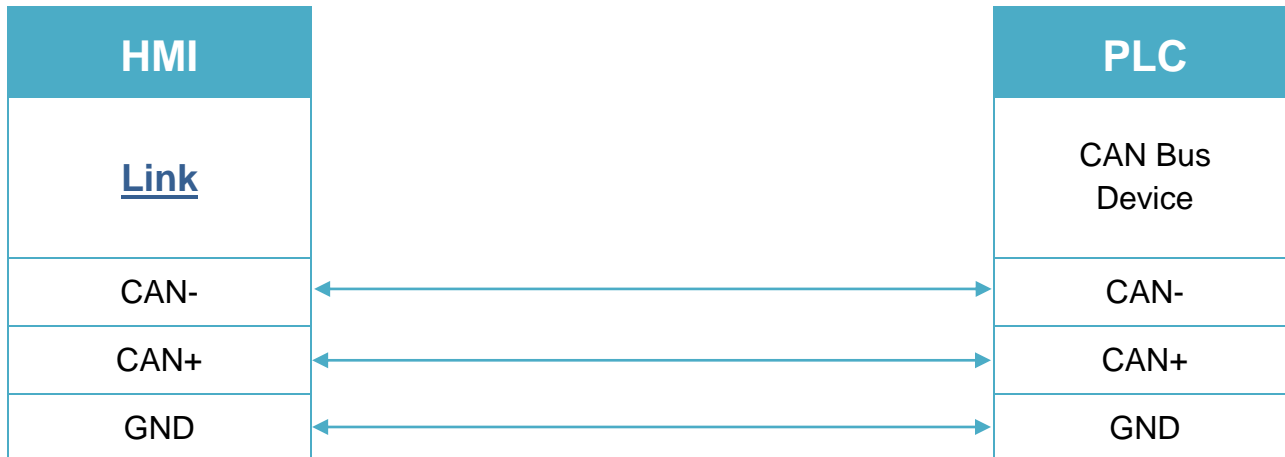


The image shows the 'Data update type' dialog box. It has three radio button options: 'Cycle mode (the device automatically and periodically refreshes register information)', 'Write mode (the register supports write command only)', and 'Request mode' (selected). To the right of 'Request mode', there is a field for 'Update time' set to '300 ms'. At the bottom, there is a note: '\* If the register information is not updated after update timer ends, HMI will send read requests.'

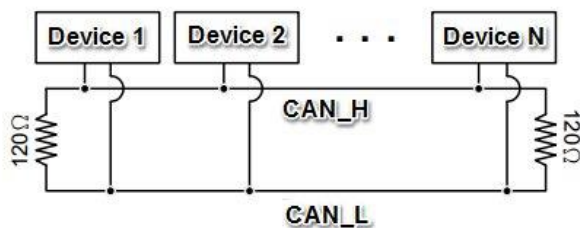
## Wiring Diagram:

### CANBus

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



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.



### Demo Project Link:

