

I-7540D-MTCP FAQ

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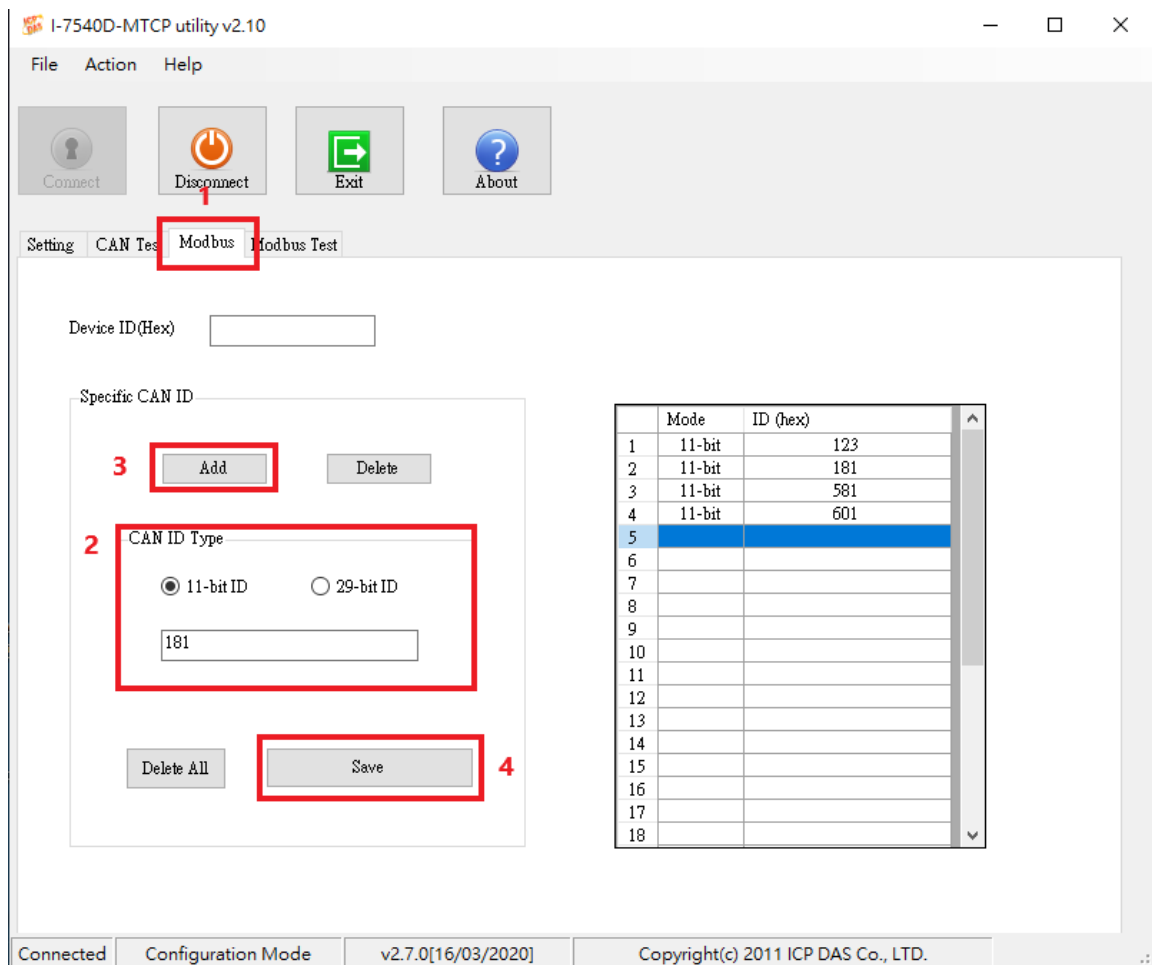
Q1 、 How do I get CAN message from Normal CAN field of I-7540D-MTCP through Modbus TCP? (2020/12/02,Evan)

A : First, connect to port 502 of I-7540D-MTCP. Then use function code 0x04 to read 7 or 9 words of the input register with address 0. If there are CAN messages in the buffer of Normal CAN field, I-7540D-MTCP will return the message. Or it will return error code.
(2020/12/02,Evan)

Q2 、 How do I get CAN message from Specific CAN field of I-7540D-MTCP through Modbus TCP? (2020/12/02,Evan)

A :

1. First, configure those CAN ID which you want to get in the Modbus page of the utility. Run utility and turn to Modbus page. Then input CAN ID to the text box and press the 'Add' button to add the ID to the right list. Finally, press 'Save' button to save the CAN ID of the list to I-7540D-MTCP.



2. Connect to port 502 of I-7540D-MTCP. Then use function code 0x04 to read 7 or 9 words of the input register with the address in the following table. I-7540D-MTCP will return the latest message with the CAN ID which is configured by utility.

Modbus address	Words	Description
0x0E10 ~ 0x0E21	18	Specific CAN message #01
0x0E22 ~ 0x0E33	18	Specific CAN message #02
0x0E34 ~ 0x0E45	18	Specific CAN message #03
...
0x101A ~ 0x102C	18	Specific CAN message #30

Acceptance Code and Acceptance Mask are the functions of CAN hardware filter of I-7540D. Users can use these two parameters to filter those unnecessary CAN messages. By setting Acceptance Code, users can set the CAN ID they want to get. Setting Acceptance Mask can filter the unnecessary CAN ID. Please refer to the section 3.1.3 of the I-7540D user manual for more information.

(2020/12/02,Evan)

Q3 · How to mapping the Modbus data to CAN? (2022/11/29,Alina)

A:

About mapping Modbus data, please refer to the table below

The format of each received CAN Message is described below:

Word number	Description
1	Bit 15: 0→valid data, 1→invalid data Bit 6~14: Reserved Bit 5: CAN Specification, 0→2.0A, 1→2.0B Bit 4: RTR, 0→No, 1→Yes Bit 0~3: Data length, value=0~8
2	Most significant two bytes of CAN identifier. (Big-endian)
3	Least significant two bytes of CAN identifier. (Big-endian)
4	The data 1 and data 2 of CAN data field.
5	The data 3 and data 4 of CAN data field.
6	The data 5 and data 6 of CAN data field.
7	The data 7 and data 8 of CAN data field.
8	Most significant two bytes of the RX timestamp message. (Big-endian)
9	Least significant two bytes of the RX timestamp message. (Big-endian)

For example:

Send CAN message as below:

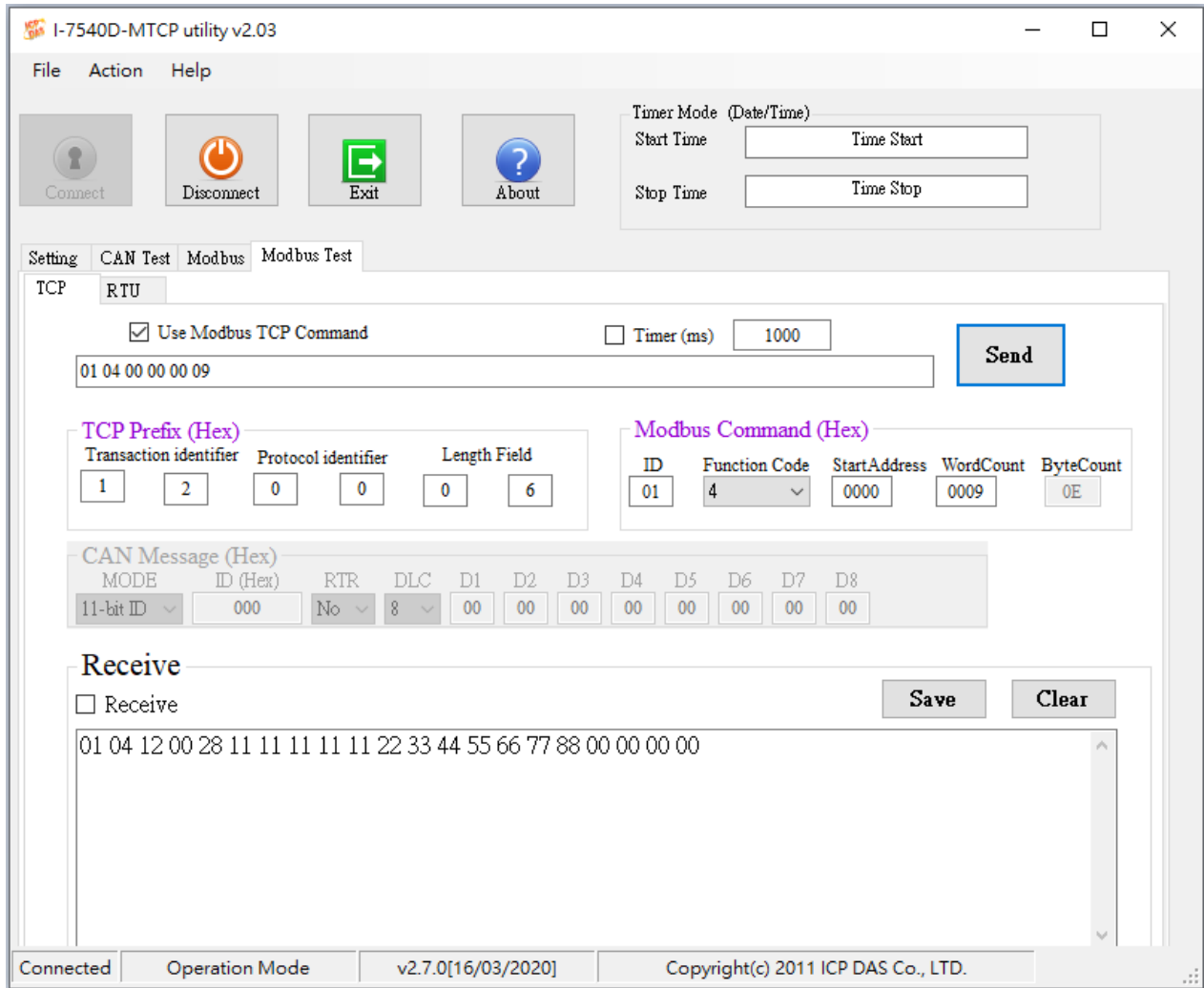
Mode	ID (Hex)	RTR	FDL	DL	Data	Timer (ms)		
29-bit ID	11111111	0	0	8	11-22-33-44-55-66-77-88	0		
No	MODE	ID(hex)	RTR	FDL	DL	Data	Timer	Status
0	1	11111111	0	0	8	11-22-33-44-55-66-77-88	0	NONE

CAN Specification 2.0B RTR: 0 DataLength: 8

ID : 0x11111111

Data: 11-22-33-44-55-66-77-88

You will receive as below(Hex):

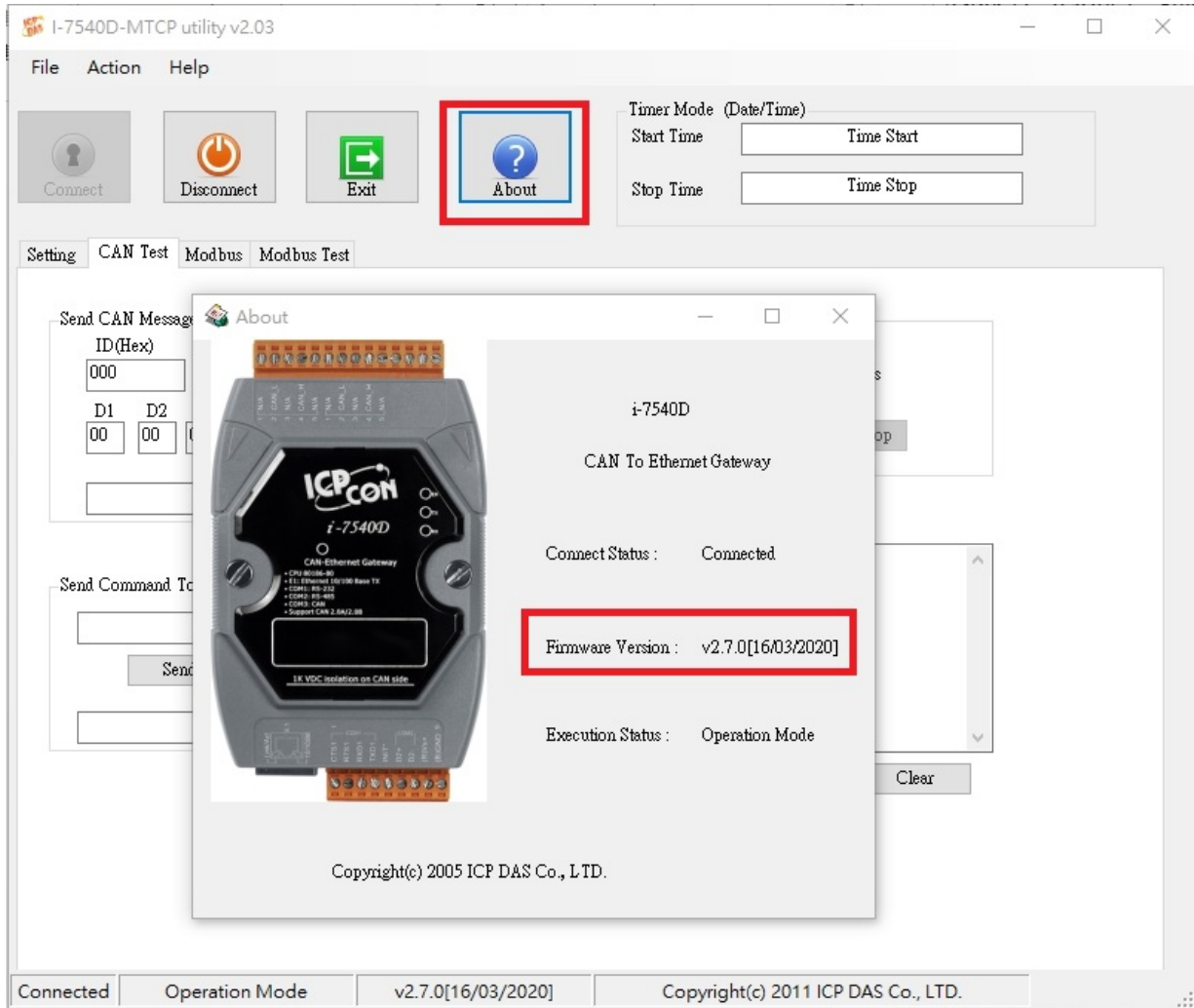


01 : Modbus ID 04:Modbus Function 12:Modbus data length(byte)
 00 28 : Word1 of table (bit0~3 is 8 = CAN data length ; bit5 is 1 = CAN specification 2.0B)
 11 11 11 11 :Word2 & Word3 of table(CAN ID)
 11 22: Word4 of table (CAN data1 & data2)
 33 44: Word5 of table (CAN data3 & data4)
 55 66: Word6 of table (CAN data5 & data6)
 77 88: Word7 of table (CAN data7 & data8)
 00 00 00 00: Word8 & Word9 of table(Time stamp)
 (2022/11/29, Alina)

**Q4 · What is the Modbus address for reading specific CAN messages?
(2022/11/29,Alina)**

A:

Please confirm the firmware version through Utility



Before Firmware Version V2.7:

Modbus Address	Word Count	Description
0x0E10~0x0F21	9	Specific RX CAN Message #01
...
0x0FFF~0x1010	9	Specific RX CAN Message #29
0x101A~0x102B	9	Specific RX CAN Message #30

After Firmware Version V2.7:

Modbus Address	Word Count	Description
0x0708~0x0710	9	Specific RX CAN Message #01

...
0x0804~0x080C	9	Specific RX CAN Message #29
0x080D~0x0815	9	Specific RX CAN Message #30

(2022/11/29, Alina)

Q5、What to do when the I-7540D-MTCP keeps showing 6ff01 and the error led is on? (2022/11/29,Alina)

A:

If the display “keeps showing 6FF01”, it means the I-7540D has not entered the firmware
Here are a few methods that may solve the problem.

(1)update firmware

The update steps are as follows

1. Download the firmware from the I-7540D website

I-7540D-MTCP-G , I-7540DM-MTCP

檔案名稱	版本	檔案日期	大小	備註	Download
I-7540D-MTCP-G, I-7540DM-MTCP Firmware .		2022-06-23			
I-7540D-MTCP-G, I-7540DM-MTCP Firmware					

2. Turn the switch on the back of I-7540D-MTCP to “Init” and power on I-7540D-MTCP.



3. Connect COM1 of I-7540D-MTCP to COM1 of PC.



4. Open 7188xw.exe and press "F4". It will upload firmware to I-7540D-MTCP.

	7188xw	2007/10/30 下午 05:19
	7188xw	2021/1/22 下午 03:44
	7433_218	2021/1/22 下午 03:41
	autoexec	2021/1/22 下午 01:40

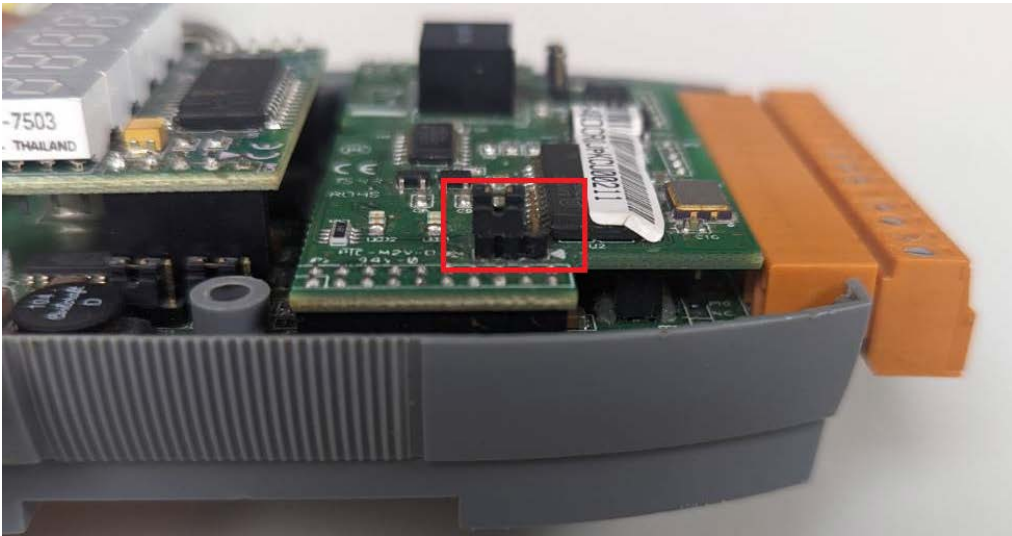
```
7188XW 1.34 [COM1:115200,N,8,1],FC=0,CTS=0, DIR=C:\Users\dfgh8\Downloads\GW7433D_
7188x for WIN32 version 1.34 (2007/07/05)[By ICPDAS, Tim Tsai.]
[Begin Key Thread...]
Current set: Use COM1 115200,N,8,1
AutoRun:
Autodownload files: None
Current work directory="C:\Users\dfgh8\Downloads\GW7433D_"
original baudrate = 115200
now baudrate = 115200
nPAC-7186EX_UDP>del /y
Total File number is 2, do you really want to delete(y/n)?
nPAC-7186EX_UDP>LOAD
File will save to 8000:0000
StartAddr-->7000:FFFF
Press ALT_B to download file!
Load file:autoexec.bat[crc=5677,0000]
Send file info. total 1 blocks
Block 1
Transfer time is: 0.109000 seconds
nPAC-7186EX_UDP>LOAD
File will save to 8002:0008
StartAddr-->8000:0027
Press ALT_B to download file!
Load file:7433_218.exe[crc=6C40,0000]
Send file info. total 1136 blocks
Block 75
```

5. After uploading firmware, turn the switch on the back of I-7540D-MTCP to "Normal" and reboot.

(2) Confirm hardware contact

Open the casing of the I7540D

1. Confirm the jumper connection is as follows



2. Confirm that the following two external modules are not in poor contact, It is recommended to re-plug.



If the above does not solve your problem, you could send us for repairing
(2022/11/29, Alina)