

03/01/17

CROUZET TOUCH - MILLENIUM3 XN05 MODBUS TCP/IP ADDRESSING CROUZET TOUCH TUTORIAL



SUMMARY

- Terminology
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- Crouzet Touch ⇔ M3 XN05 Modbus TCP/IP Addresses
- Crouzet Touch Soft - Defining the Modbus TCP/IP Network
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- Modbus TCP/IP: Crouzet Touch ⇔ M3 XN05 Word Addressing Example
- Modbus TCP/IP: Crouzet Touch ⇔ M3 XN05 Bit Addressing Example

TERMINOLOGY

- M3 → Millenium 3
- XN05 → M3 Modbus TCP/IP communication expansion (8 word R/W In, 8 word R Out)
- Crouzet Touch → Touchscreen of the Crouzet Automation nano-PLC range
- CTS = Crouzet Touch Soft → Programming software of the Crouzet Touch range

CROUZET TOUCH TO M3 XN05 MODBUS TCP/IP WIRING

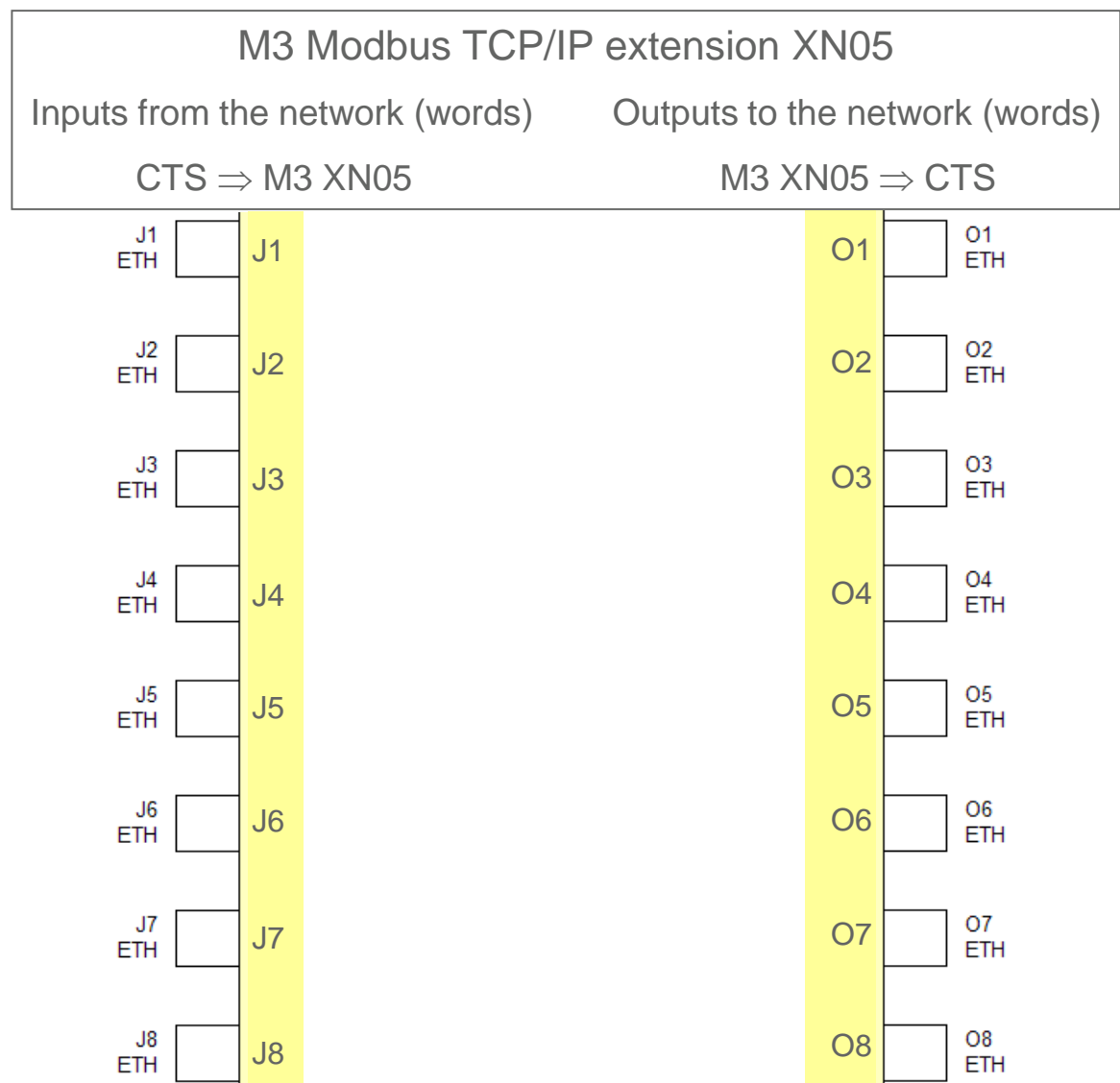
Crouzet Touch to M3 XN05 Modbus TCP/IP Wiring



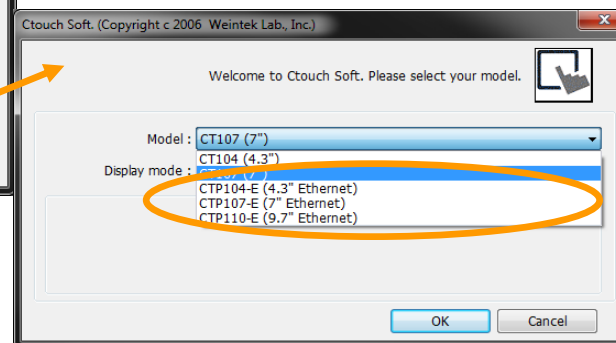
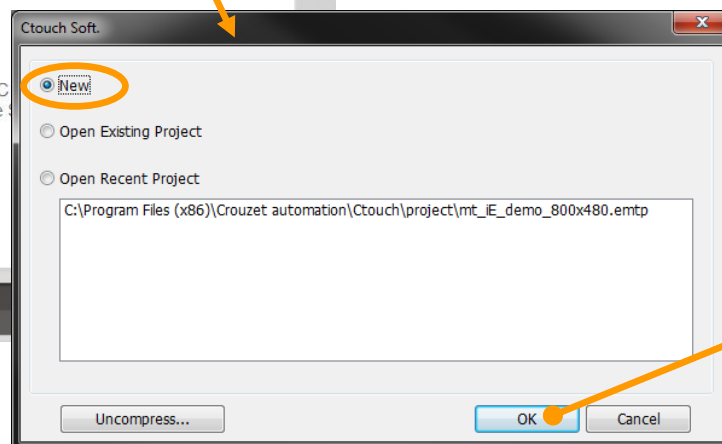
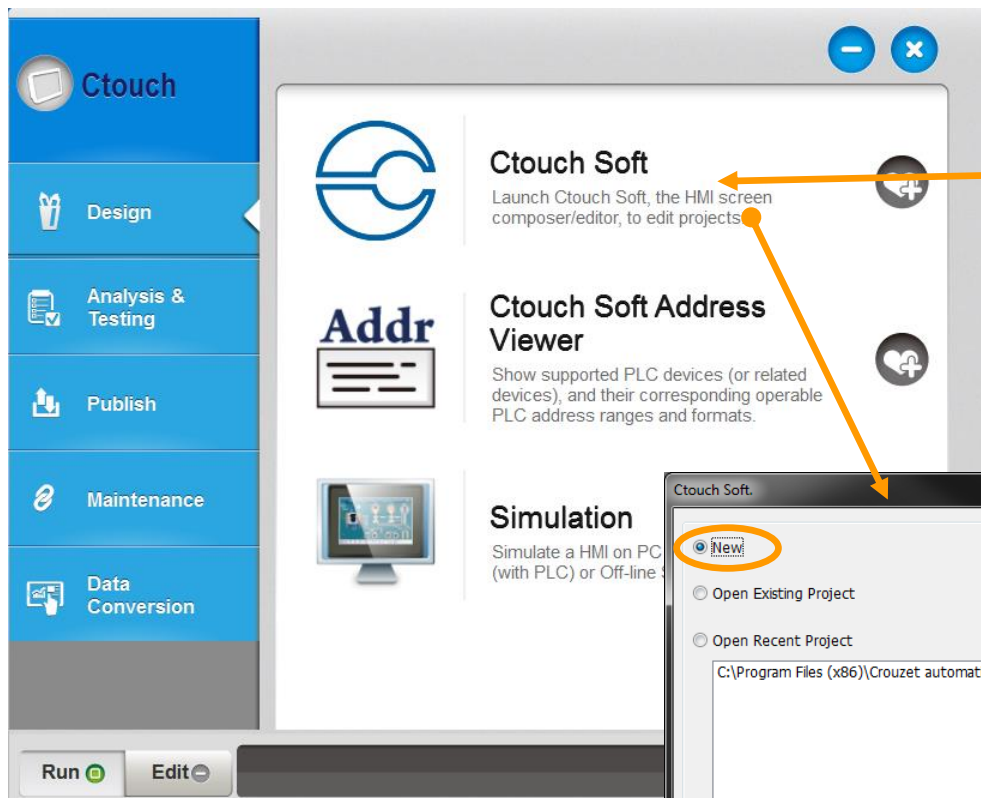
- The Crouzet Touch screen versions *CTP107-E*, *CTP110-E* or *CTP104-E* can be connected to an M3 XN05 Modbus TCP/IP expansion via the Crouzet 88 970 508 Ethernet cable or standard Ethernet cable.

CTS ⇔ M3 XN05 MODBUS TCP/IP ADDRESSES

CTS ⇔ M3 XN05 Modbus TCP/IP Addresses

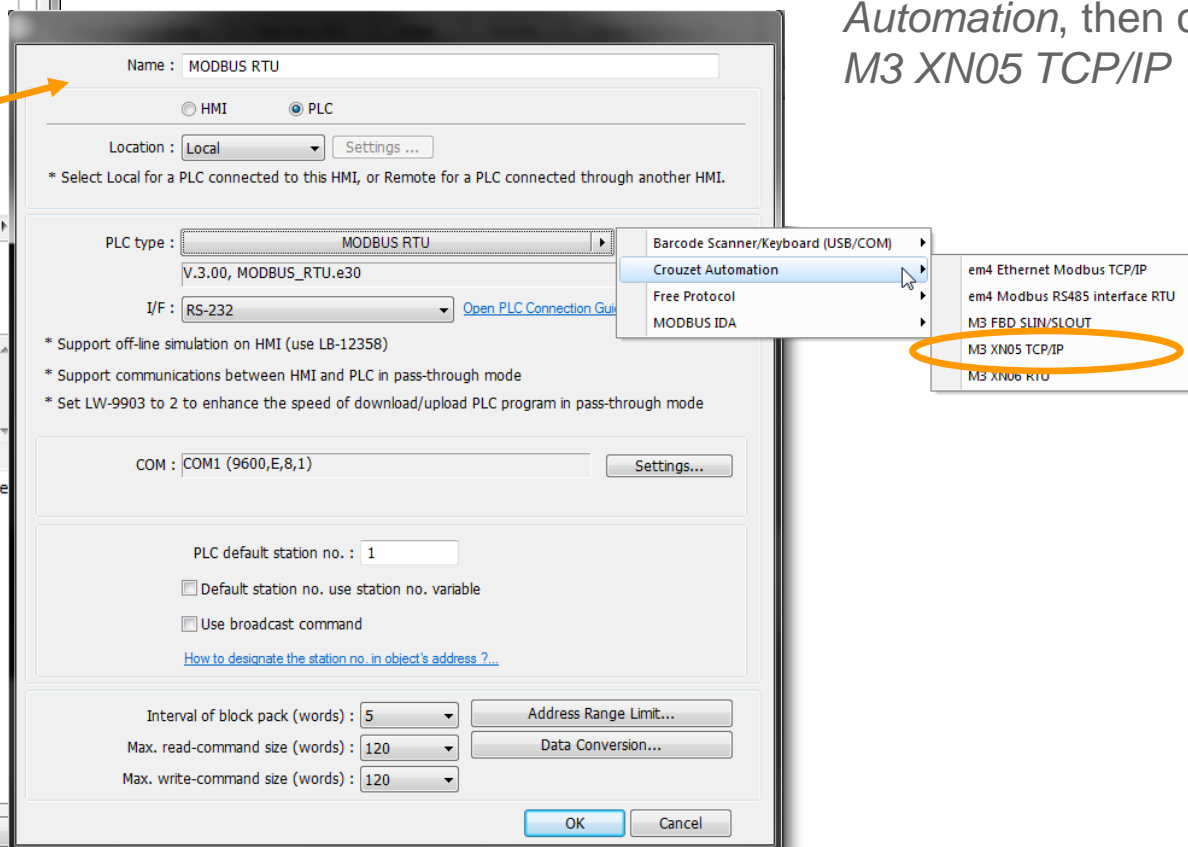


CROUZET TOUCH SOFT- DEFINING THE MODBUS TCP/IP NETWORK



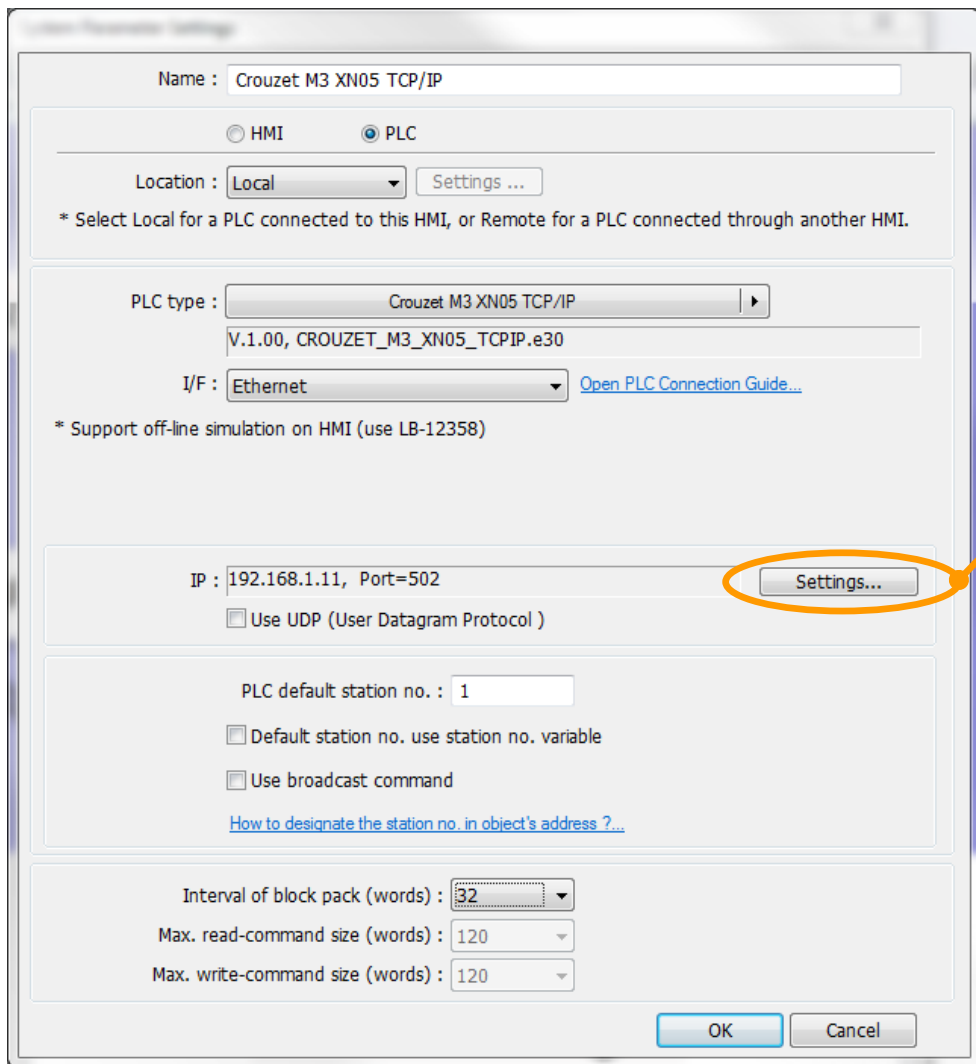
In order to define the Modbus TCP/IP network in the *Crouzet Touch Soft*:

- Click on *Ctouch Soft* in the *Utility Manager*
- Select *New* to create a new project
- Click *OK*
- Then select the *Crouzet Touch* screen Ethernet version that is to be used and confirm by click on *OK*



In the *System Parameter Settings* window that opens click *New* to define the *Device* (the network)

- In *PLC type* select *Crouzet Automation*, then click on *M3 XN05 TCP/IP*



Name : Crouzet M3 XN05 TCP/IP

☐ HMI ☒ PLC

Location : Local [Settings ...](#)

* Select Local for a PLC connected to this HMI, or Remote for a PLC connected through another HMI.

PLC type : Crouzet M3 XN05 TCP/IP
V.1.00, CROUZET_M3_XN05_TCPIP.e30

I/F : Ethernet [Open PLC Connection Guide...](#)

* Support off-line simulation on HMI (use LB-12358)

IP : 192.168.1.11, Port=502 [Settings...](#)

☐ Use UDP (User Datagram Protocol)

PLC default station no. : 1

☐ Default station no. use station no. variable

☐ Use broadcast command

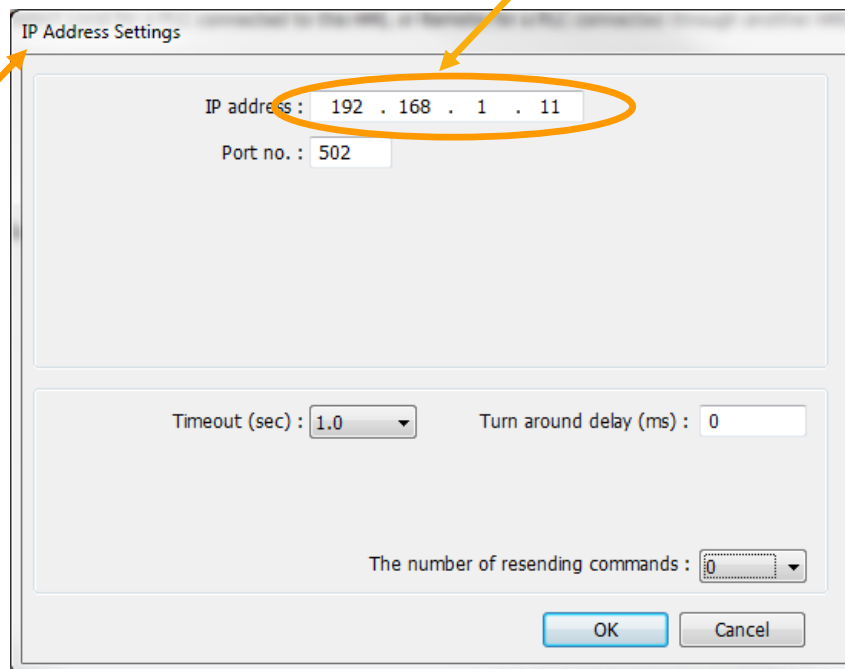
[How to designate the station no. in object's address ?...](#)

Interval of block pack (words) : 32

Max. read-command size (words) : 120

Max. write-command size (words) : 120

OK Cancel



IP Address Settings

IP address : 192 . 168 . 1 . 11

Port no. : 502

Timeout (sec) : 1.0 **Turn around delay (ms) :** 0

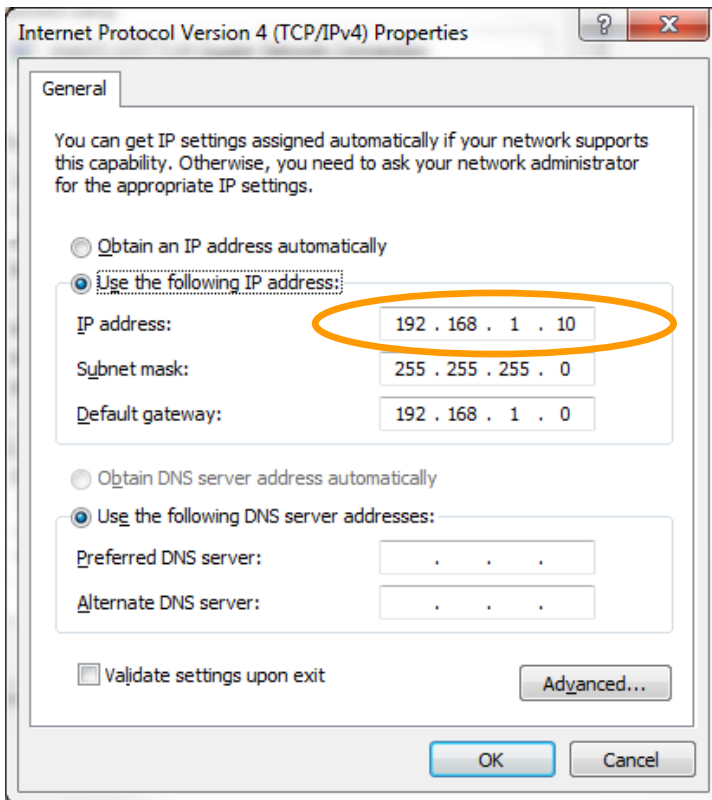
The number of resending commands : 0

OK Cancel

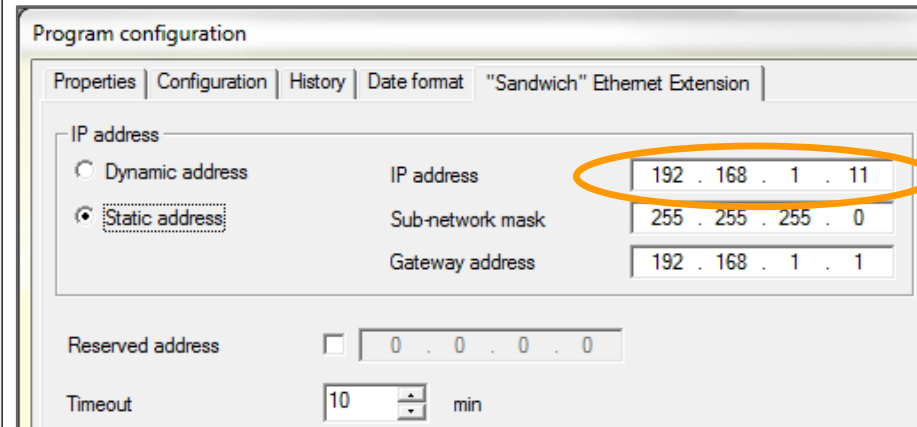
- Click *Settings* to enter the IP address of the M3 XN05 extension
- The IP address has to be identical with the one defined in the M3 program
- Confirm with *OK*

Repeat this procedure for every XN05 extension on the network, using different names and IP addresses for identification.

M3 ⇔ CROUZET TOUCH ⇔ PC: STATIC IP ADDRESS SETTING EXAMPLE

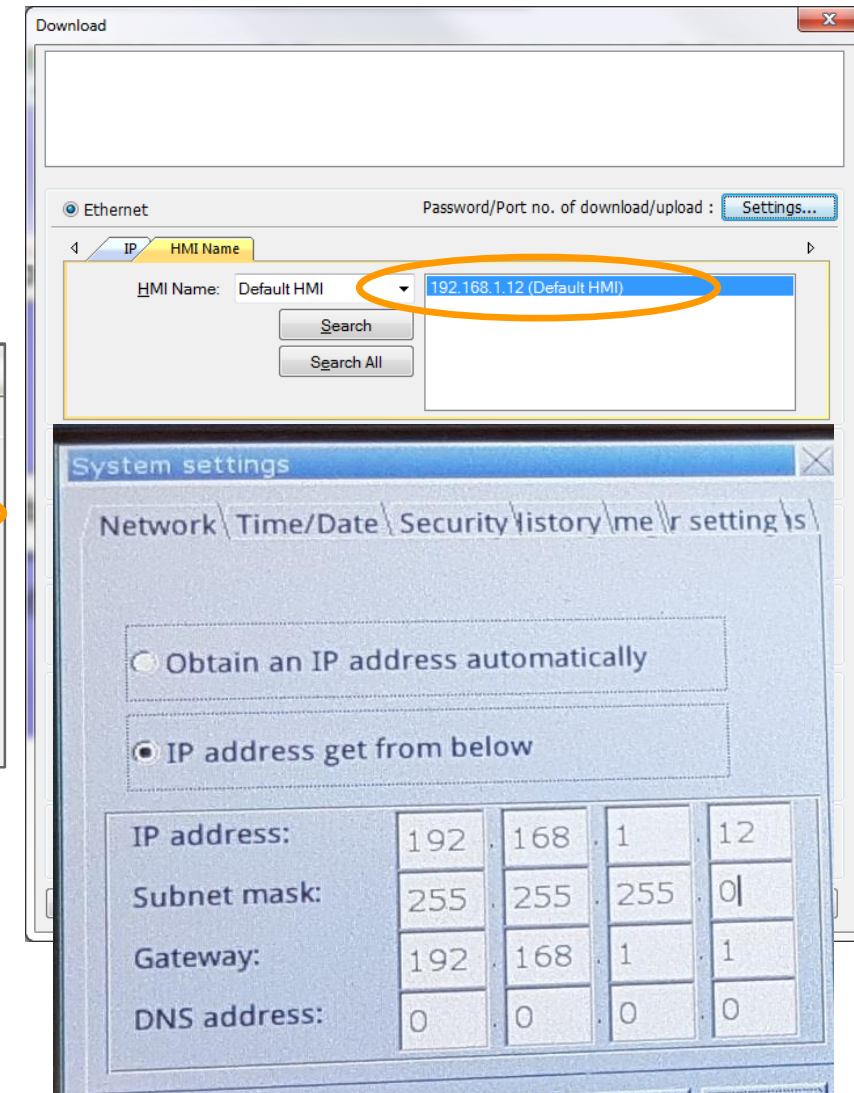


Win7 Laptop



M3 XN05

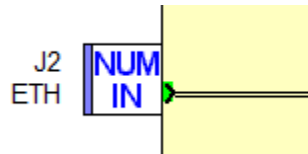
Please view our *Crouzet Touch QUICKSTART* tutorial for more details about how to set the PC and Crouzet Touch IP addresses



Crouzet Touch

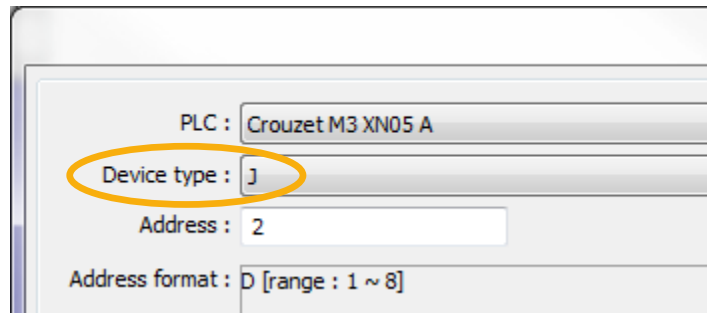
MODBUS TCP/IP: CTS \Leftrightarrow M3 XN05 WORD ADDRESSING EXAMPLE

Writing a value from Crouzet Touch
to M3 XN05 (Crouzet M3 XN05 A)
M3: J2 ETH

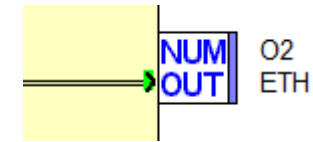


\Rightarrow CTS: *Device type* J
Address 2

Crouzet M3 XN05 A, write address J2 ETH

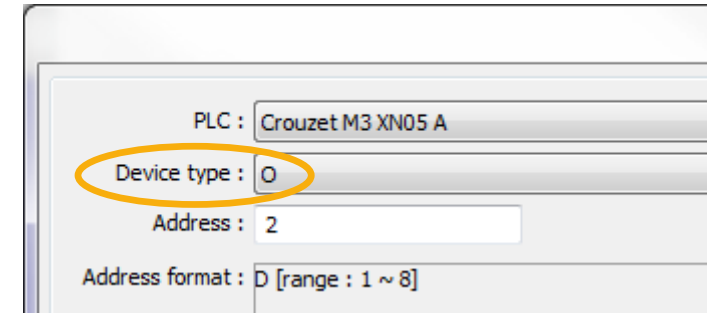


Reading a value from M3 XN05 (Crouzet
M3 XN05 A) by the Crouzet Touch
M3: O2 ETH



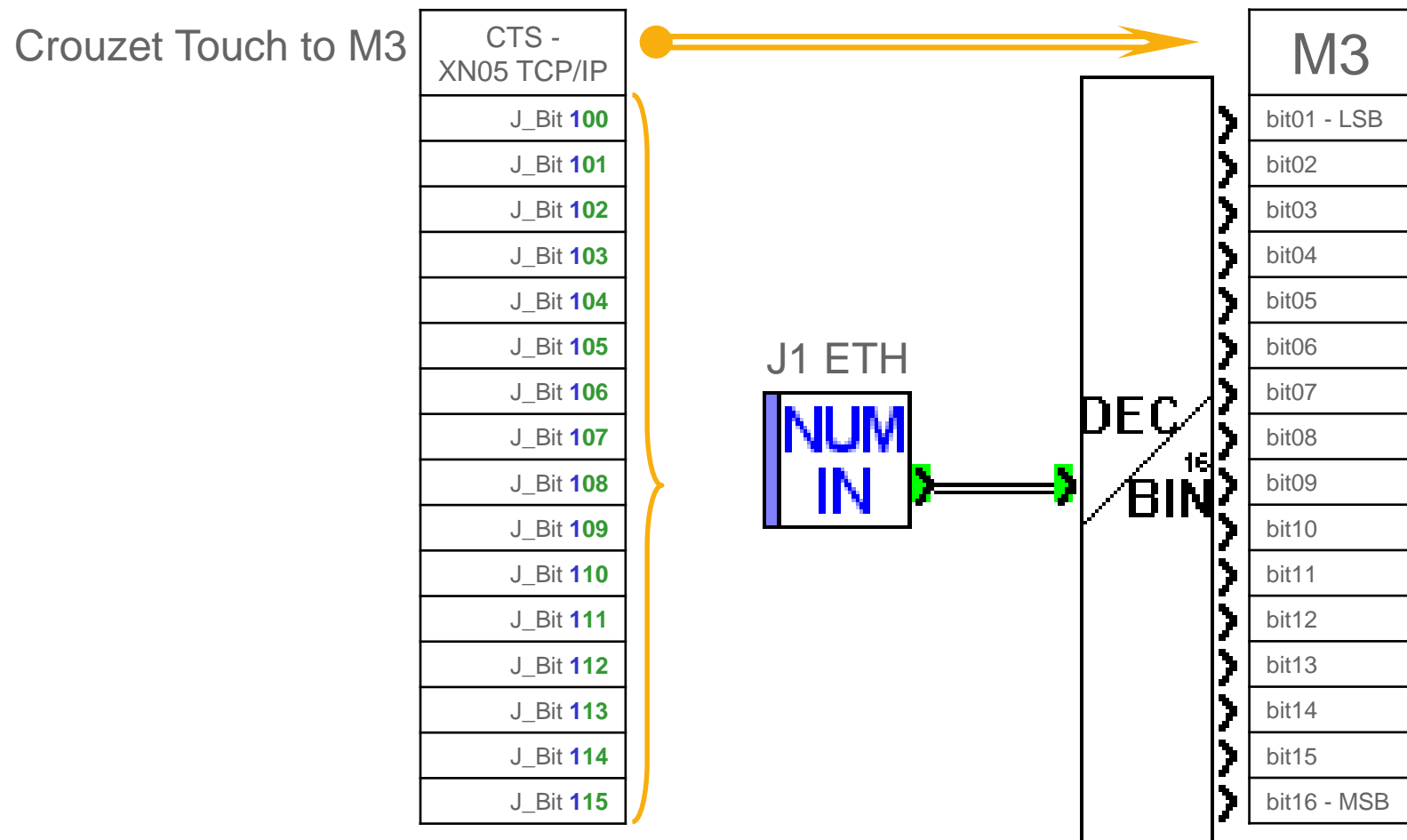
\Rightarrow CTS: *Device type* O
Address 2

Crouzet M3 XN05 A, read address O2 ETH



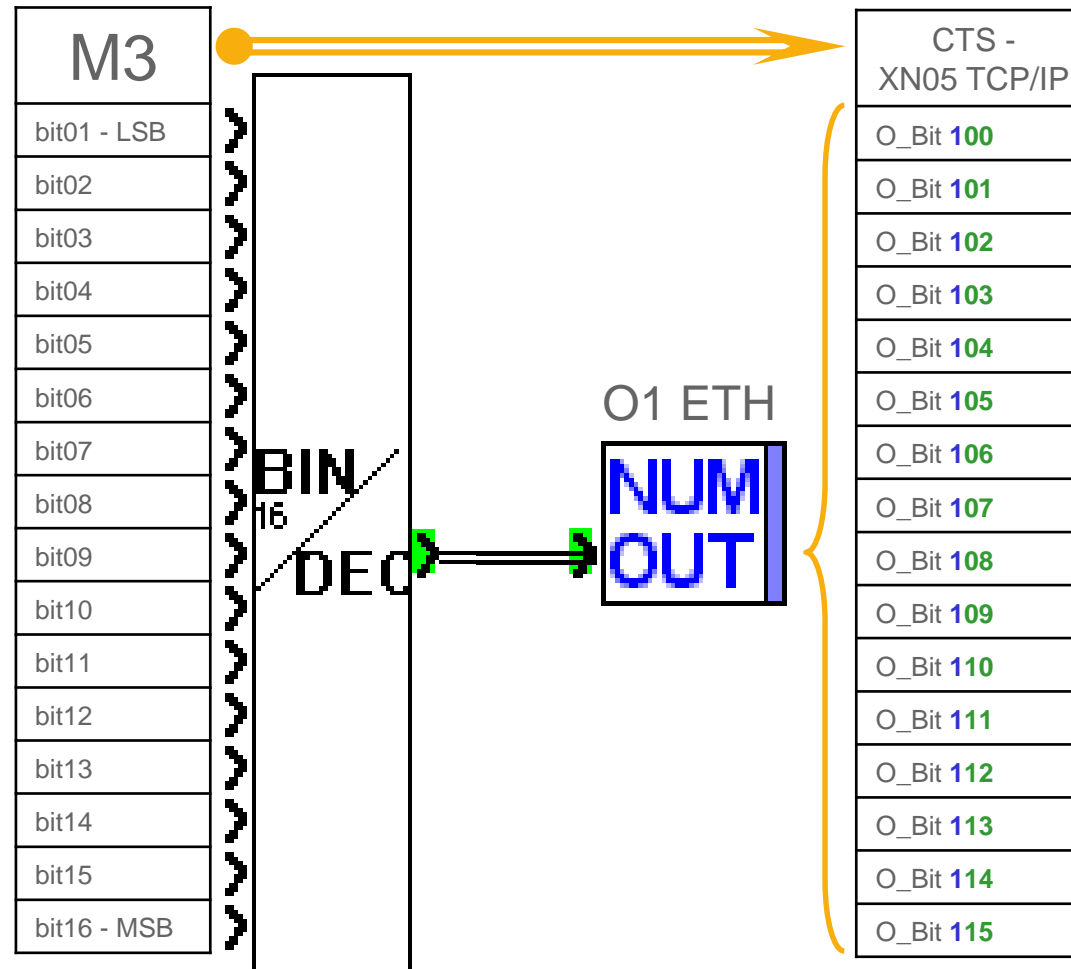
MODBUS TCP/IP: CTS \Leftrightarrow M3 XN05 BIT ADDRESSING EXAMPLE

CTS: writing/reading an M3 XN05 bit via *Crouzet M3 XN05 TCP/IP*



CTS: reading a bit from M3 XN05 via *Crouzet M3 XN05 TCP/IP*

M3 to Crouzet Touch

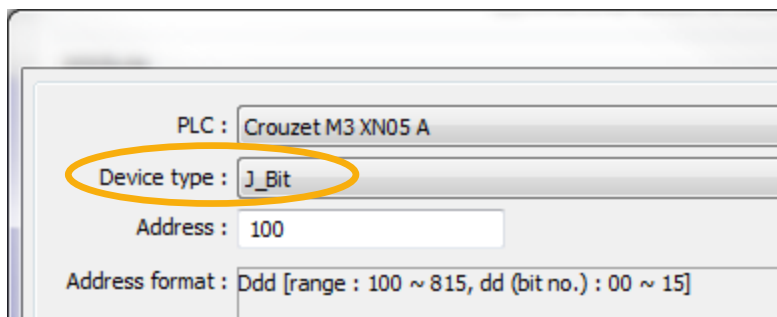
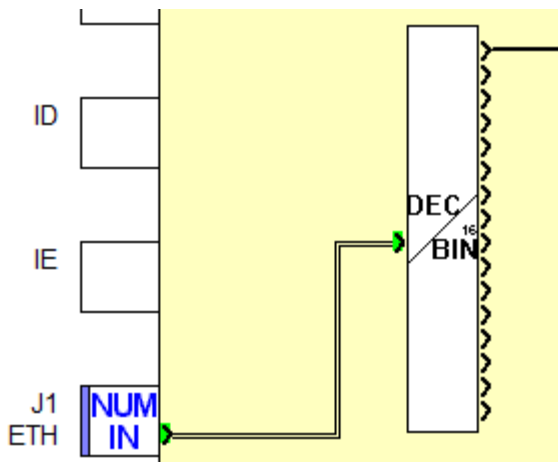


Writing a bit from the Crouzet Touch to M3
(Crouzet M3 XN05 A)

M3: J1 ETH, bit 01

\Rightarrow CTS: *Device type* **J_Bit**

Address 100 (word1, bit 00)

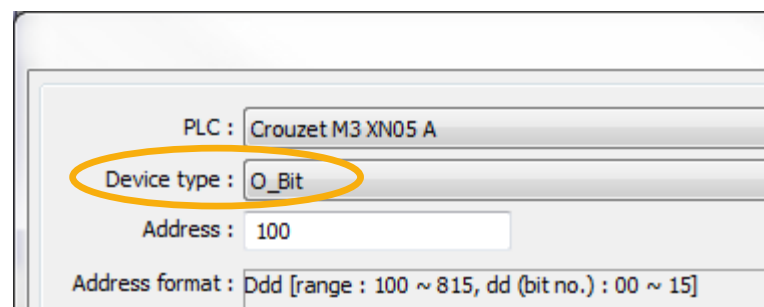
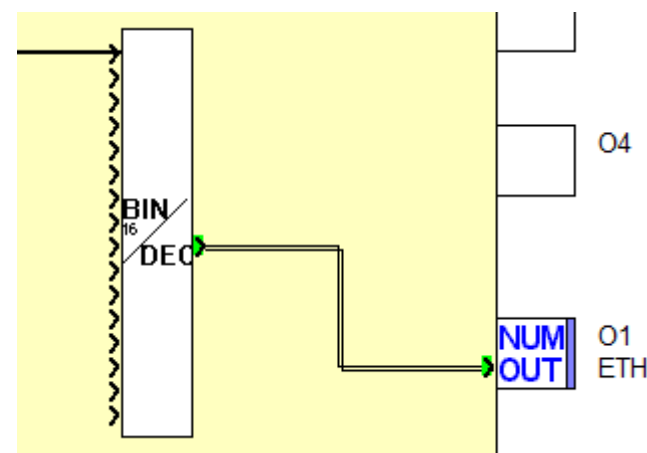


Reading an M3 bit (Crouzet M3 XN05 A) by
the Crouzet Touch

M3: O1 ETH, bit 01

\Rightarrow CTS: *Device type* **O_Bit**

Address 100 (word1, bit 00)



THANK YOU FOR YOUR ATTENTION

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