

Tech. Note

TN537D

Communication Settings of AB MicroLogix Series Ethernet Module

V0.0, Sep. 2010

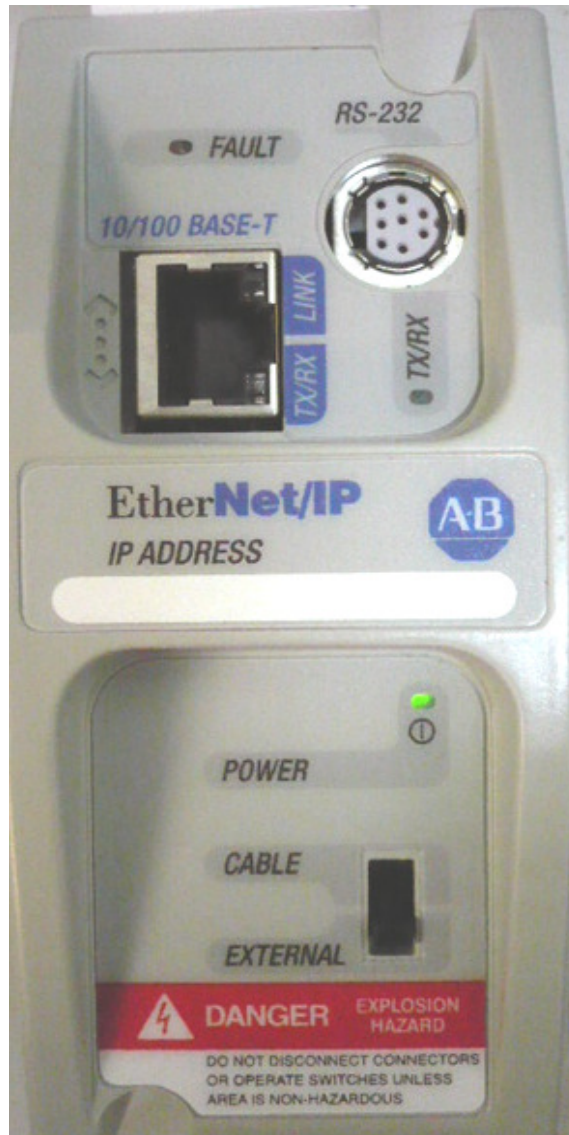
PanelMaster, PanelExpress and PM Designer



Preface

This tech note is to explicate how to connect AB Ethernet Module with PanelMaster as well as the related communication parameter settings.

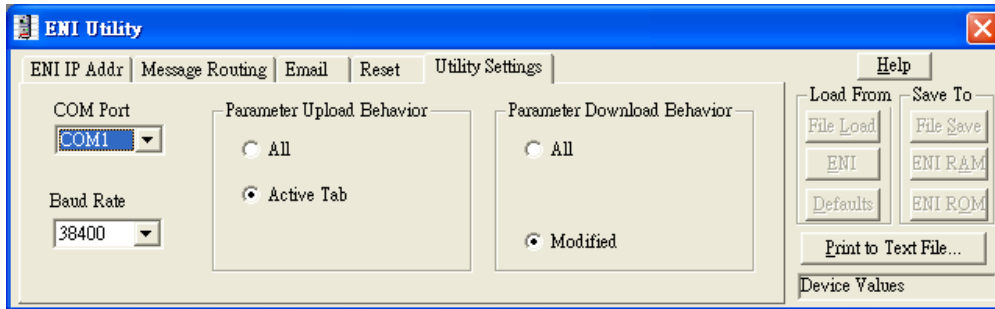
AB Ethernet Module 1761-NET-ENI



1) Software Parameter Settings

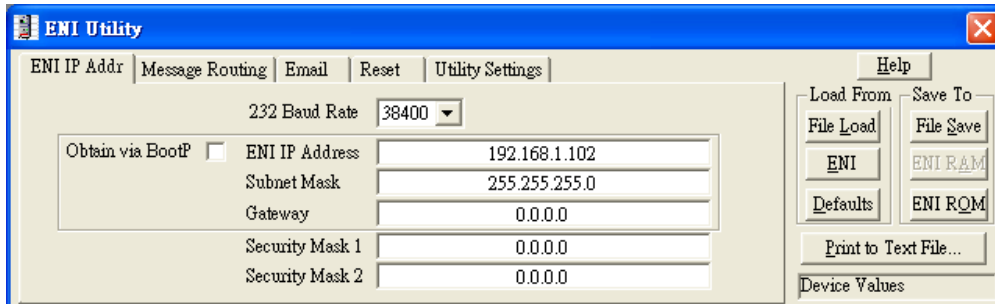
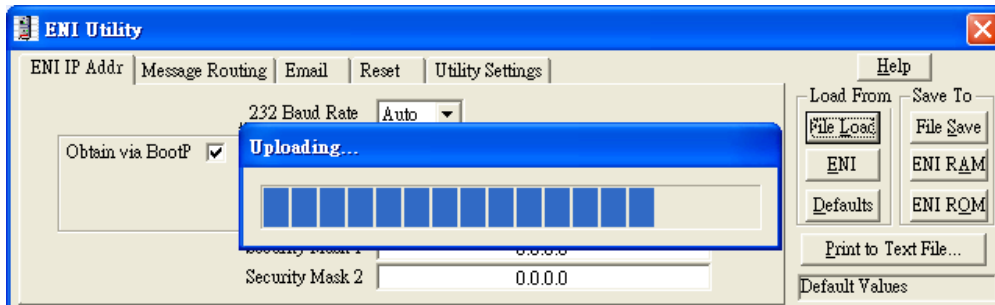
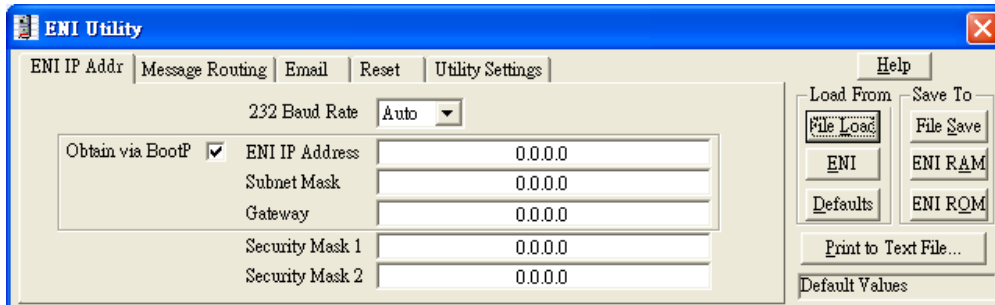
(a) Open Rockwell Software --- Set Ethernet Module parameters in ENI Utility

Step 1: Click "Start"---"All Program" --- "ENI Utility" --- ENI Utility tool (as illustrated below)



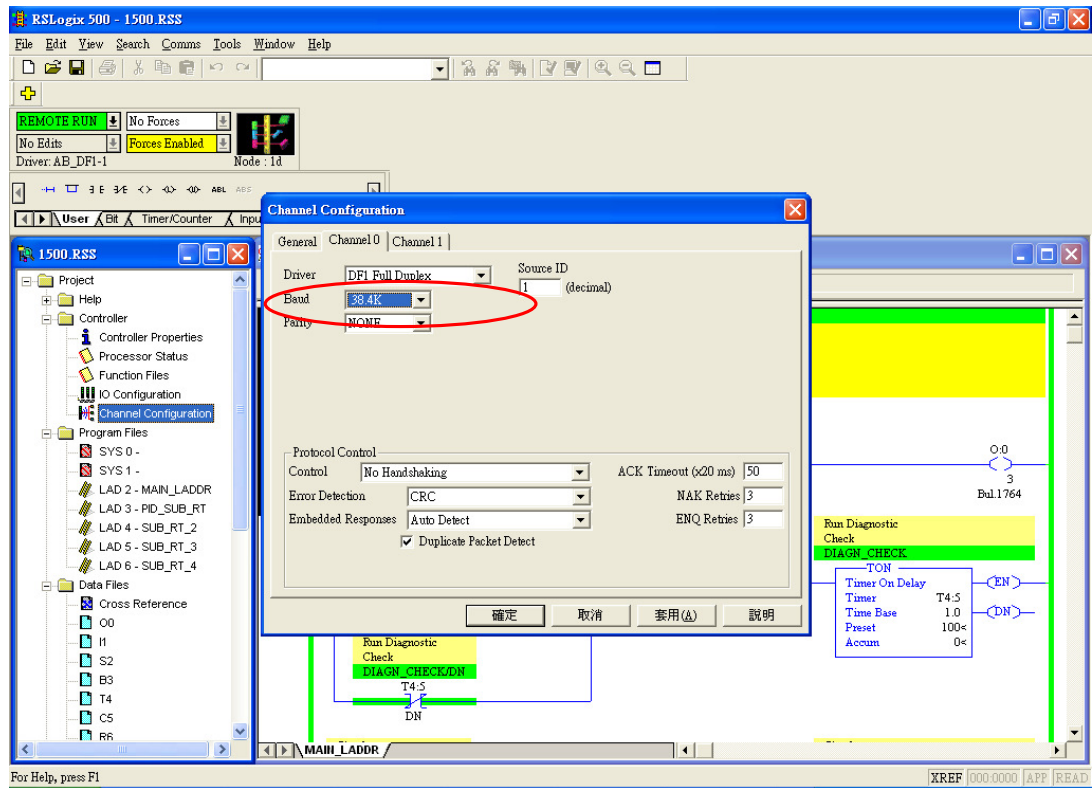
1761-NET-ENI default setting of Baud Rate is 38,400k bps

Step 2: Select ENI IP Address page and than press "Load From"---"ENI" to load module IP address.



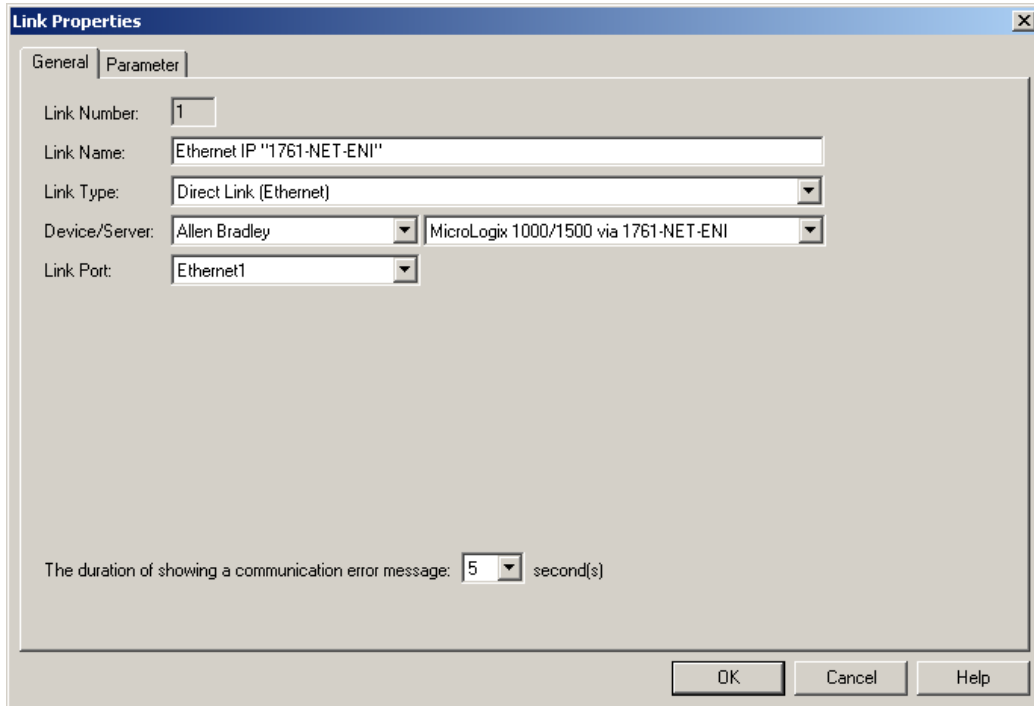
Step 3: Because Ethernet IP module needs to connect with CPU to transfer data, the CPU port baud rate parameter must be identical with the serial port of Ether IP module.

[Important]



2) Parameters Setting of HMI:

Select **【Direct Link(Ethernet)】** --- **【Device/Server : MicroLogix 1000/1500 via 1761-NET-ENI】**

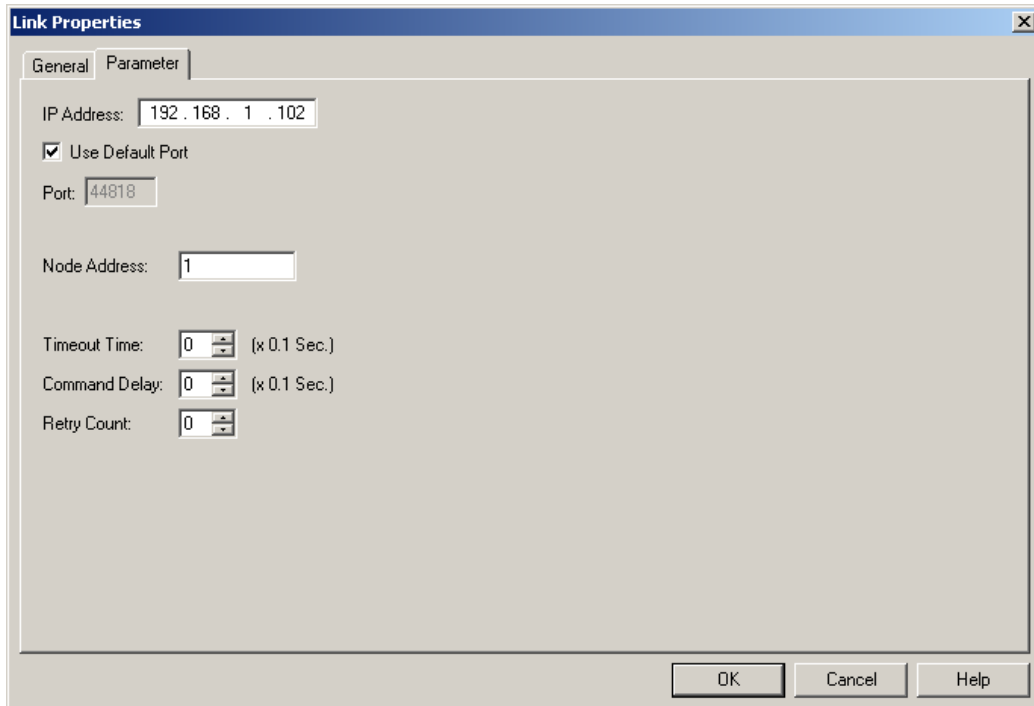


The screenshot shows the 'Link Properties' dialog box with the 'General' tab selected. The fields are as follows:

- Link Number: 1
- Link Name: Ethernet IP "1761-NET-ENI"
- Link Type: Direct Link (Ethernet)
- Device/Server: Allen Bradley (dropdown) | MicroLogix 1000/1500 via 1761-NET-ENI (dropdown)
- Link Port: Ethernet1 (dropdown)
- The duration of showing a communication error message: 5 (dropdown) second(s)

Buttons at the bottom: OK, Cancel, Help.

Set the HMI link port parameter identical with PLC communication parameter



The screenshot shows the 'Link Properties' dialog box with the 'Parameter' tab selected. The fields are as follows:

- IP Address: 192 . 168 . 1 . 102
- Use Default Port
- Port: 44818
- Node Address: 1
- Timeout Time: 0 (x 0.1 Sec.)
- Command Delay: 0 (x 0.1 Sec.)
- Retry Count: 0

Buttons at the bottom: OK, Cancel, Help.

3) PLC Address

Bit Devices:

Bit Device	Address Range	Block Address	Comment
O:e.s/b	e: 0~9; s: 0~255; b: 0~15	N/A	
I:e.s/b	e: 0~9; s: 0~255; b: 0~15	N/A	
Sf:n/b	n: 0~65; f: 2; b: 0~15	b=0	
Bf:n/b	n: 0~255; f: 3, 9~255; b: 0~15	b=0	
Tf:n/b	n: 0~255; f: 4, 9~255; b: 0~15	b=0	
Tf:n.PRE/b	n: 0~255; f: 4, 9~255; b: 0~15	b=0	
Tf:n.ACC/b	n: 0~255; f: 4, 9~255; b: 0~15	b=0	
Tf:n/EN	n: 0~255; f: 4, 9~255	N/A	
Tf:n/TT	n: 0~255; f: 4, 9~255	N/A	
Tf:n/DN	n: 0~255; f: 4, 9~255	N/A	
Cf:n/b	n: 0~255; f: 5, 9~255; b: 0~15	b=0	
Cf:n.PRE/b	n: 0~255; f: 5, 9~255; b: 0~15	b=0	
Cf:n.ACC/b	n: 0~255; f: 5, 9~255; b: 0~15	b=0	
Cf:n/CU	n: 0~255; f: 5, 9~255	N/A	
Cf:n/CD	n: 0~255; f: 5, 9~255	N/A	
Cf:n/DN	n: 0~255; f: 5, 9~255	N/A	
Cf:n/OV	n: 0~255; f: 5, 9~255	N/A	
Cf:n/UN	n: 0~255; f: 5, 9~255	N/A	
Cf:n/UA	n: 0~255; f: 5, 9~255	N/A	
Rf:n/b	n: 0~255; f: 6, 9~255; b: 0~15	b=0	
Rf:n.LEN/b	n: 0~255; f: 6, 9~255; b: 0~15	b=0	
Rf:n.POS/b	n: 0~255; f: 6, 9~255; b: 0~15	b=0	
Rf:n/EN	n: 0~255; f: 6, 9~255	N/A	
Rf:n/DN	n: 0~255; f: 6, 9~255	N/A	
Rf:n/ER	n: 0~255; f: 6, 9~255	N/A	
Rf:n/UL	n: 0~255; f: 6, 9~255	N/A	
Rf:n/IN	n: 0~255; f: 6, 9~255	N/A	
Rf:n/FD	n: 0~255; f: 6, 9~255	N/A	
Nf:n/b	n: 0~255; f: 7, 9~255; b: 0~15	b=0	

Close

Word Devices:

Word Device	Address Range	Size	Comment
O:e.s	e: 0~9; s: 0~255	Word	
I:e.s	e: 0~9; s: 0~255	Word	
Sf:n	n: 0~65; f: 2	Word	
Bf:n	n: 0~255; f: 3, 9~255	Word	
Tf:n	n: 0~255; f: 4, 9~255	Word	
Tf:n.PRE	n: 0~255; f: 4, 9~255	Word	
Tf:n.ACC	n: 0~255; f: 4, 9~255	Word	
Cf:n	n: 0~255; f: 5, 9~255	Word	
Cf:n.PRE	n: 0~255; f: 5, 9~255	Word	
Cf:n.ACC	n: 0~255; f: 5, 9~255	Word	
Rf:n	n: 0~255; f: 6, 9~255	Word	
Rf:n.LEN	n: 0~255; f: 6, 9~255	Word	
Rf:n.POS	n: 0~255; f: 6, 9~255	Word	
Nf:n	n: 0~255; f: 7, 9~255	Word	
Ff:n	n: 0~255; f: 8, 9~255	Word	
Af:n	n: 0~255; f: 9~255	Word	

Close

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