

KB Name	Schneider M340		
Type	Communications tests		
Since revision			
KB Number	KB-00xx	Build	6
Mod date	3. Aug. 2010		

Knowledge Base Information

Schneider M340

Communications tests

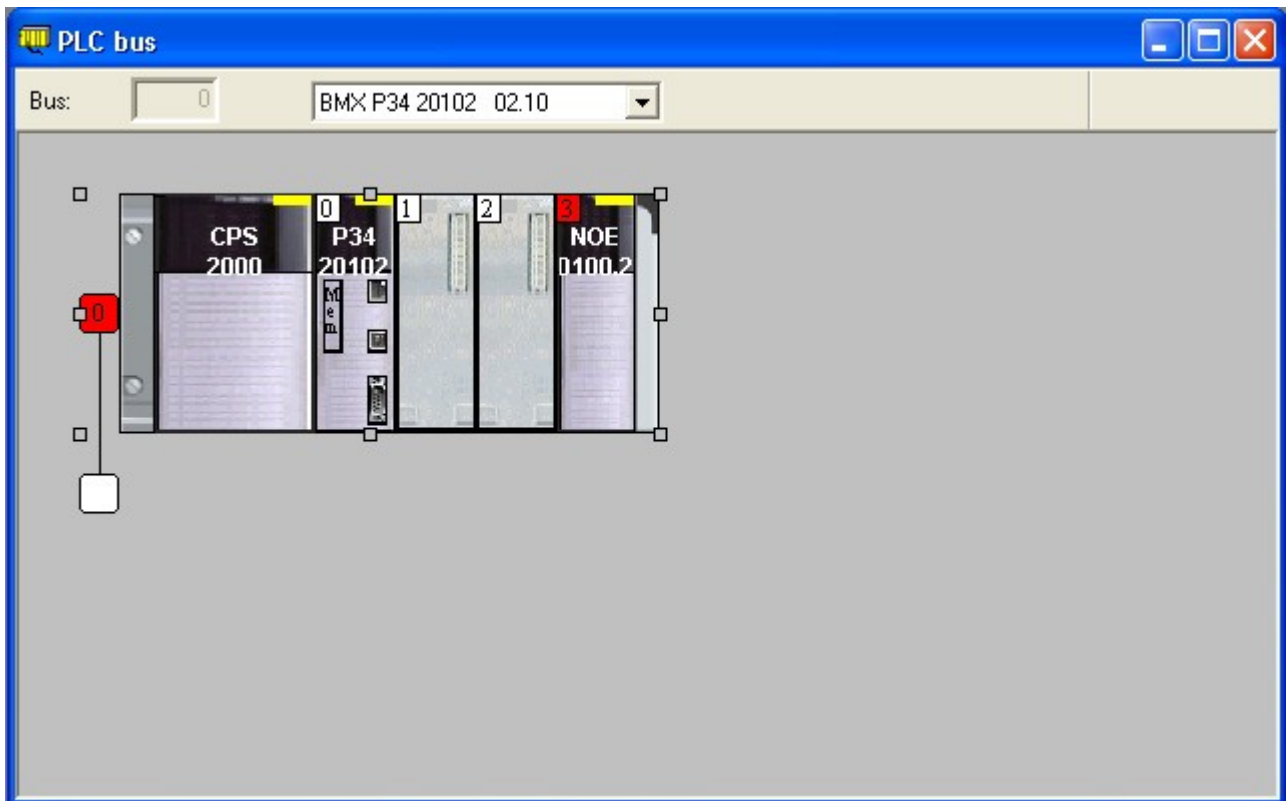
1 Schneider M340

Tests made on M340 (provided by EFA).

Power: CPS2010

CPU: P3420102 (CanOpen + Serial)

Ethernet: NOE0100



Software used: UnityProS (evaluation period of 21 days)

KB Name	Schneider M340		
Type	Communications tests		
Since revision			
KB Number	KB-00xx	Build	6
Mod date	3. Aug. 2010		

Knowledge Base Information

1.1 Ethernet link

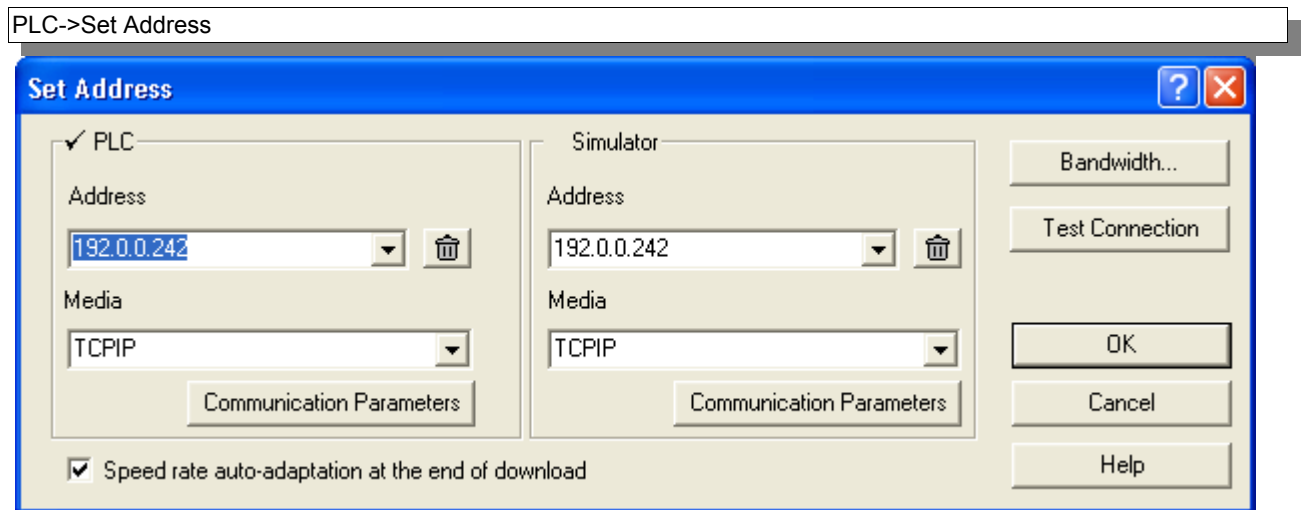
The Ethernet plug is an RJ45 marked with a green arrow.

Device was received with the IP: 192.0.0.242

First connection was made with this address.

Software used: UnityProS

On Unity, goes on menu



And copy the program on Unity (Upload Project).

1.1.1 Ethernet Remote Maintenance

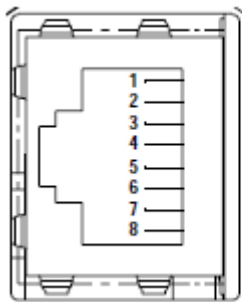
Test made with Talk2M Free : routing through an eWON2005 on *Internet on WAN* : **OK**

KB Name	Schneider M340		
Type	Communications tests		
Since revision			
KB Number	KB-00xx	Build	6
Mod date	3. Aug. 2010		

Knowledge Base Information

1.2 Serial link

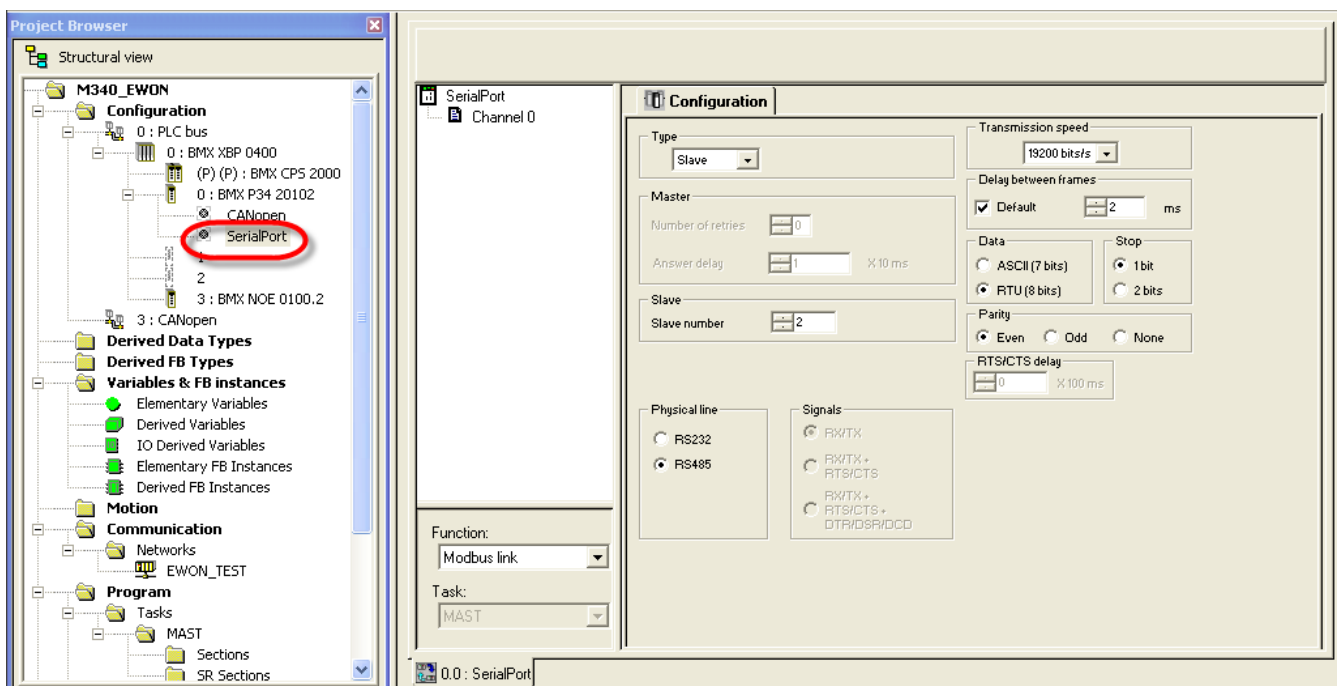
The serial connector is a RJ45 plug (marked with a black arrow).



1	RXD
2	TXD
3	RTS
4	D1
5	D0
6	CTS
7	Power Supply
8	Common Shielding

RJ45		eWON-DB9
4 (D1)	-----	3 (A+)
5 (D0)	-----	8 (B-)
8	-----	5

Modbus RTU (RS485) configuration of the M340:



Goes on the SerialPort configuration of the M340 and set the ModbusRTU parameters to what you need:

Function	Modbus link
Type	Slave
Slave number	2 (for example)

Build and download the project to use your new settings.

Test your settings by polling Modbus tag (ex: 40001) from an eWON.

KB Name	Schneider M340		
Type	Communications tests		
Since revision			
KB Number	KB-00xx	Build	6
Mod date	3. Aug. 2010		

Knowledge Base Information

1.2.1 Serial Remote Maintenance

As the M340 is Modbus, Serial Remote Maintenance will be done with the Modbus gateway (ModbusTCP → ModbusRTU) functionality of the eWON.

Create a ModbusTCP
eVCOM port:

The image shows two software windows. The top window is 'eVCOM' with a 'Virtual Ports' table containing 'COM5' of type 'Modbus TCP'. The 'Config' tab for 'COM5' shows 'Port Name: COM5', 'Port Type: Modbus TCP', and 'Auto create at startup' checked. The bottom window is 'MODBUS Driver - MODBUS01' with 'COM Port' set to 'COM5' and 'Baud Rate' set to '19200'. A red arrow points to the 'OK' button in the MODBUS Driver window.

and configure the Schneider Serial modbus Driver to use the eVCOM port (here COM5).

and set the Unity communication settings to Modbus and Address 2

Disable the Speed auto-adaptation.

The 'Set Address' dialog box shows 'PLC' checked and 'Address' set to '2'. The 'Media' is set to 'MODBUS01'. The 'Speed rate auto-adaptation at the end of download' checkbox is unchecked. A red circle highlights the 'Address' dropdown, and another red circle highlights the unchecked checkbox.

KB Name	Schneider M340		
Type	Communications tests		
Since revision			
KB Number	KB-00xx	Build	6
Mod date	3. Aug. 2010		

2 Remote Maintenance tests

2.1 Ethernet link with M340

eWON2005 <i>Internet on LAN</i>	eCatcher Free	OK
eWON2005 <i>Internet on ISDN</i>	eCatcher Free	OK
eWON2101 <i>Internet on EDGE</i>	eCatcher Free	OK (*)
eWON2101 <i>Internet on GPRS</i>	eCatcher Free	OK (*)

2.2 Serial link with M340

eWON2005 <i>Internet on ISDN</i>	eVCOM + eCatcher Free	OK
eWON2101 <i>Internet on EDGE</i>	eVCOM + eCatcher Free	OK
eWON2005 <i>Internet on GPRS</i>	eVCOM + eCatcher Free	OK

(*) I've encountered some connection errors/retries.

Then I increased the TimeOut to 10sec (default is 3sec) and the communication was more reliable.

