



How to setup the WA232E Serial WiFi adapter **(based on Windows 10, 32/64-bit)**

This step-by-step guide explains how to get started using the Serial RS232 WiFi Adapter part WA232E.

This product has many more advanced features and functions than described in this guide so you should consider this guide only as a quick-start guide to help you get started with the basic functions.





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Configuring the parameters

The WA232E's parameters can be configured several ways:

- Web browser over WiFi
- Configuration utility software (included) over WiFi
- Serial RS232 port

We will here describe each one of these methods.

The default network settings are:

Adhoc mode (Simple AP), DHCP enabled

SSID: Serial2WiFi_ab_cd (ab_cd is the last 4 numbers of the MAC address)

No Security

IP: 192.168.0.3

Socket port: 5000

Channel: 11

Log in ID: admin

Log in password: admin

The default COM port settings are:

Baud rate: 9600 bps

Data bit: 8

Parity: none

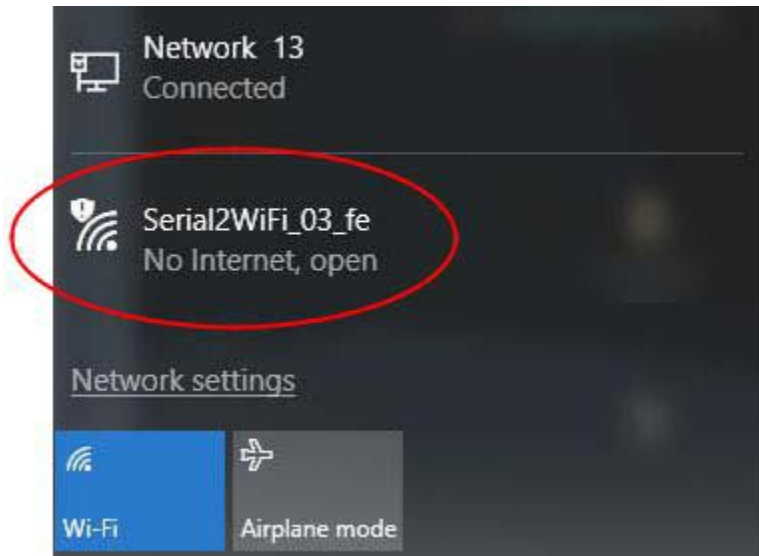
Stop bit: 1

Flow control: none



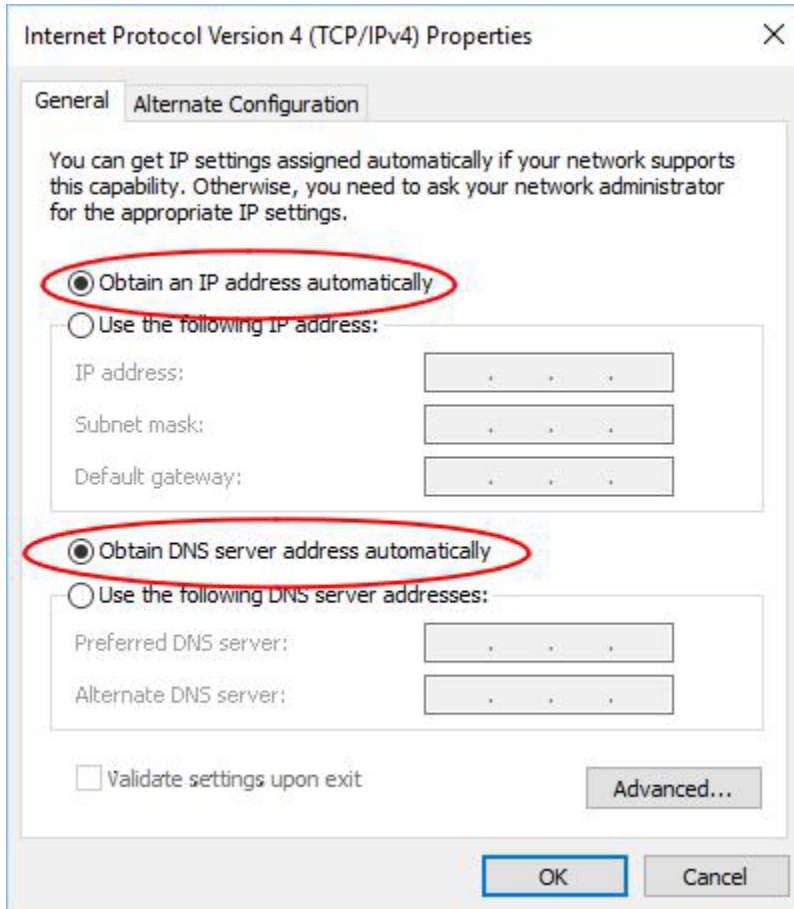
Configuring the parameters using a Web browser

Use your WiFi adapter's connection manager or Windows WiFi manager to connect to the adapter. In this example we use Windows connection manager:





The WA232E has DHCP enabled by default so make sure your wireless network has “Obtain an IP address automatically” selected. Go to “Control Panel\All Control Panel Items\Network Connections”, right-click wireless network and click “Properties”. Select “Internet Protocol Version 4 (TCP/IPv4)” and click “Properties”.

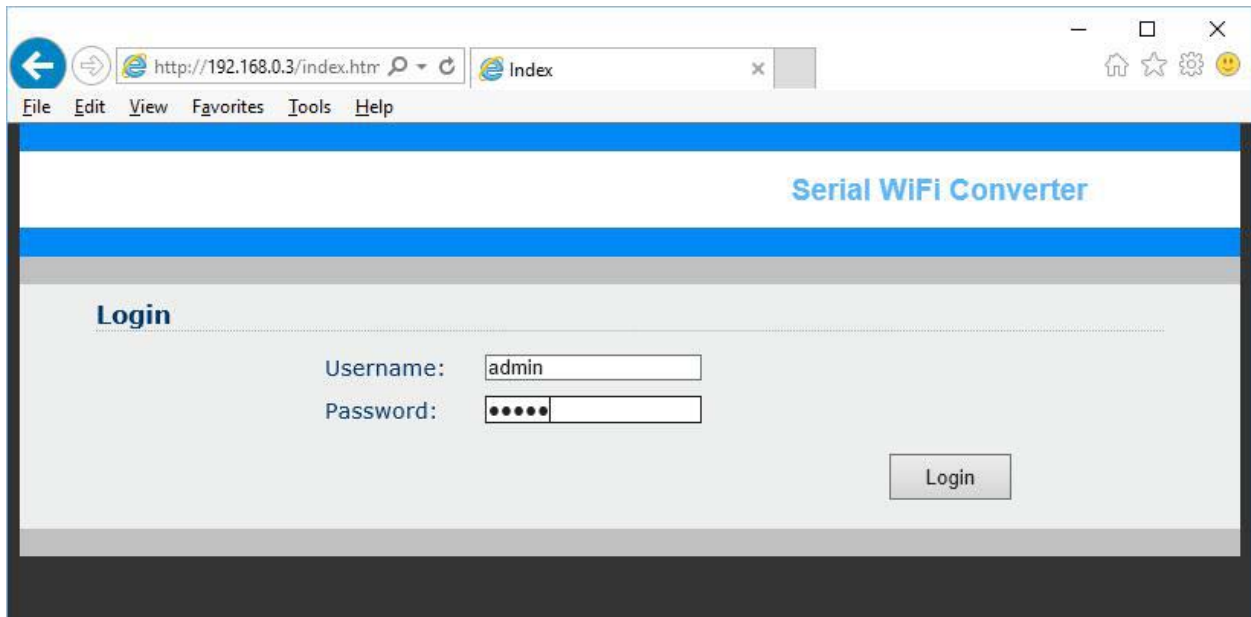




Open Internet Explorer and enter the IP address <http://192.168.0.3>. You should now see the login screen.

The default username is: admin

The default password is: admin





Below are screenshots of the default configuration pages (firmware v_0.7.4.0103):

The screenshot shows a web browser window displaying the configuration page for a Serial WiFi Converter. The browser address bar shows the URL `http://192.168.0.3/basic.htm`. The page title is "Serial WiFi Converter" and it includes a "Logout" link. The navigation menu has tabs for "Basic", "Advanced", "Security", "WiFi", "WiFi Wizard", "RTC", and "Status".

Serial Settings

- Device Name: (Note: Device name can be up to 16 characters.)
- Data Baud Rate:
- Data Bits:
- Data Parity:
- Stop Bits:
- Flow Control:
- RS485:

Serial to Network Settings

- Operation Mode:
- Connection Type:
- Transmit Timer (ms): (Note: Please enter an integer between 10~65535.)
- Server/Client Mode:
- Server Listening Port: (Note: Please enter an integer between 1024-65535.)
- TCP Server Connections: (Note: This is effective only for TCP server under Socket or VCOM mode.)
- Client Destination Host Name/IP: (Note: Please enter host name or IP address(e.g. google.com or 10.4.1.100).)
- Client Destination Port: (Note: Please enter an integer between 1024-65535.)
- Client Connection Mode:

Static IP Settings

- Static IP Address:
- Static Default Gateway:
- Static Subnet Mask:
- Static DNS Server:



Serial WiFi Converter

Basic **Advanced** Security WiFi WiFi Wizard RTC Status [Logout](#)

Firmware Upgrade

Image path:
Please specify the image file path for firmware upgrade.

E-mail & Auto Warning Report Settings

SMTP Server Address/IP:
Please enter host name or IP address(e.g. google.com or 10.4.1.100).

Security:

SMTP Server Port:

From E-mail Address:

To E-mail Address 1:

To E-mail Address 2:

To E-mail Address 3:

Cold Start:

Authentication Failure:

Local IP Address Changed:

Password Changed:

MODBUS Settings

Transfer Mode:

Server Port:

Response Timeout:
Available range:10~65000ms.

Inter-Frame Delay:
Available range:10~500ms.

Inter-Character Delay:
Available range:10~500ms.



Browser window: http://192.168.0.3/security.h Security

Serial WiFi Converter

Logout

Basic Advanced **Security** WiFi WiFi Wizard RTC Status

Change Username Setting

New Username:

Apply Cancel

Change Password Setting

Old Password:

New Password:

Confirm Password:

Apply Cancel

Change SMTP Username & Password Setting

Username:

Password:

Save Apply Cancel

Google Nest Setting

Server URL/HostName:

Please enter firebase id(e.g. xxx.firebaseio.com).

Save Apply Cancel

Bluemix Setting

Server HostName:

Username:

Password:

Organization ID:

Length must be 6 bytes.

Type ID:

Length must be 5 bytes.

Device ID:

Length must be 11 bytes.

API Version:

Length should be less than or equal to 12 bytes.

100%



Browser window showing the Serial WiFi Converter configuration page. The address bar displays `http://192.168.0.3/wifi.htm`. The page title is "Serial WiFi Converter".

The configuration page includes the following sections and settings:

- System Settings**
 - Network Mode: AP
 - AP Channel: 11
 - Service Area Name/SSID: Serial2WiFi_03_fe
 - Hide SSID:
 - Security Mode: Open
- WEP Encryption Key Settings**
 - Key Length: 64 bits
 - Key Index Select: Key Index 0
 - Key Index 0: 12345
 - Key Index 1: 67890
 - Key Index 2: 54321
 - Key Index 3: 09876
 - Note: Please enter 5 ASCII codes or 10-digit hex for 64-bit key length.
- AES/TKIP Encryption Key Settings**
 - AES/TKIP Passphrase: 12345678
 - Note: Please enter a string between 8-63 digits in length.

Buttons: Save, Apply, Cancel



Serial WiFi Converter

Logout

Basic Advanced Security WiFi WiFi Wizard RTC Status

Welcome to the WiFi Setup Wizard

Use site survey tool to join a WiFi AP.

ID	BSSID	SSID	TYPE	CH	SIGNAL	SECURITY
0	ae:f9:20:6e:f9:10	SETUP	Infra	11	-78	Open
1	00:0f:15:0c:c8:06	CoronaExtra	Infra	3	-82	WPA2 TKIP

Status: Scanning...ok

Scan Next



Browser window showing the Serial WiFi Converter interface. The address bar displays `http://192.168.0.3/rtc.htm`. The page title is "Serial WiFi Converter". The navigation menu includes: Basic, Advanced, Security, WiFi, WiFi Wizard, **RTC**, and Status. A "Logout" link is visible in the top right.

RTC Settings

RTC Time Setup: Manual NTP Server

Daylight Saving Time:

Note that the daylight saving time is supported only in NTP server mode.

Date&Time Settings

Date: / /
Please enter the year between 2000~2099, the month between 1~12, and the date between 1~31.

Time: / /
Please enter the hour between 0~23, the minute between 0~59, and the second between 0~59.

Note that the date and time are allowed to modify in manual mode.

SNTP Client Settings

Time Zone:

NTP Server HostName/IP 1:

NTP Server HostName/IP 2:

NTP Server HostName/IP 3:

100%



Serial WiFi Converter

Logout

Basic Advanced Security WiFi WiFi Wizard RTC **Status**

System Status

Device Name:	DSM1
Device IP Address:	192.168.0.3
Firmware Version:	0.7.4.0103(Single)
WiFi MAC address(Hex):	0x000ec64003fe
Modem Status(Hex):	0x00
Protocol Type:	TCP
Connection Status:	Idle
Serial Port TX Count(Byte):	0
Serial Port RX Count(Byte):	0
Current Temperature(°C):	0.00
Current Relative Humidity(%):	0.00
Current Date:	0/0/0 Sunday
Current Time:	0:0:7
Image File Name:	ota_r2w_v0740103_20170427.bin
Cloud Connection Status:	No cloud service

RefreshStart RefreshStop

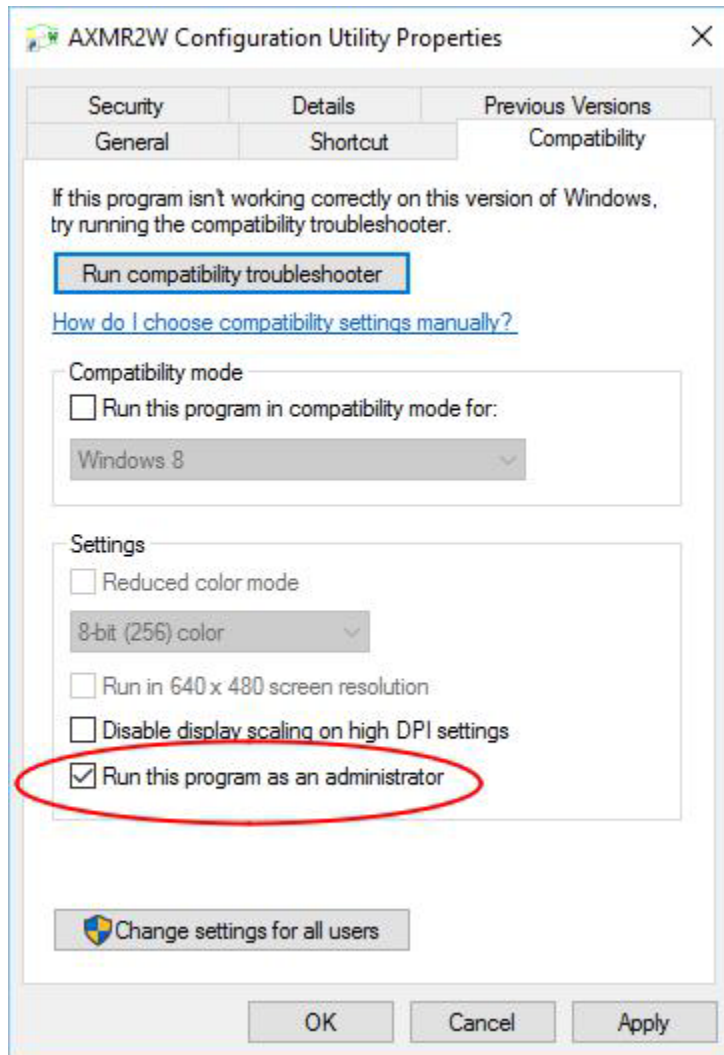
100%



Configuring the parameters using the software utility

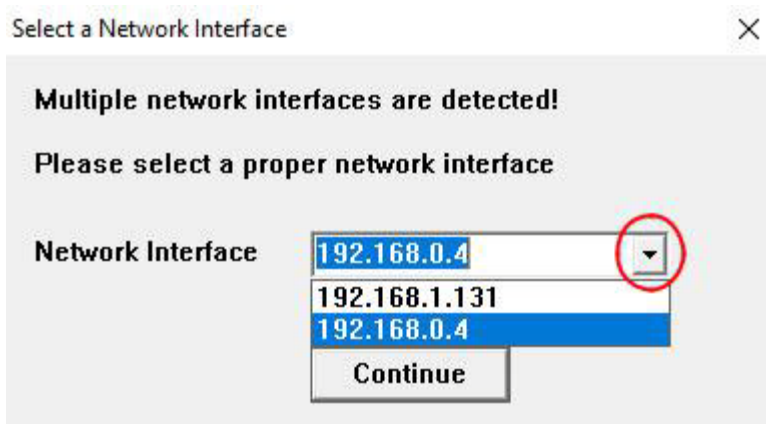
Install the software utility by executing the file “R2W_RS232-to-WiFi_Toolkit” (either the 32-bit version or the 64-bit version).

After installation has finished, start the utility with administrator privileges. You do that by right-clicking the program icon and select “Properties”, then enable “Run this program as an administrator” and click “Apply” and “OK”:





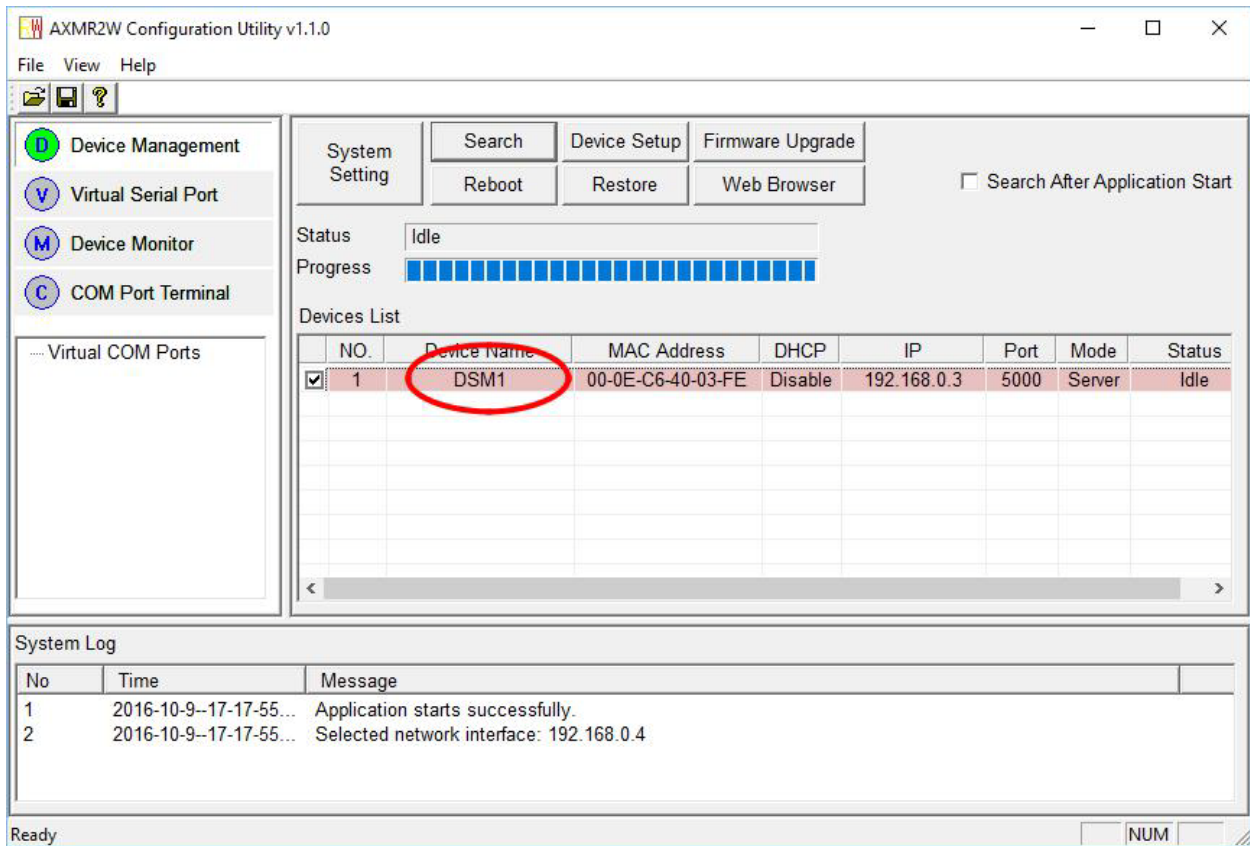
If your computer has more than one network connection you need to select the wireless network which is in the same subnet as the WA232E:



Use the up/down arrows to scroll through the IPs if there are more than two IPs.



Once the software is open, click the Search button and the software should find the WA232E:



Select the WA232E from the device list and click "Device Setup" and the settings window will open:



Device Setup

Network Setting | Serial Port Setting | WiFi Setting | DHCP Server Setting | NTP Setting

Device Name: DSM1 Operation Mode: Socket

MAC Address: 00-0E-C6-40-03-FE

DHCP: Disable Data Packet Type: UDP, TCP

Static IP: 192.168.0.3

Server Data Listening Port: 5000

Client Destination Port: 5000

Destination Hostname/IP: 192.168.0.2

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

DNS Server: 168.95.1.1

Transmit Timer: 100

Domain Name: asix.com.tw

SMTP Configuration Parameters

From Address: ds@asix.com.tw

To Address 1: to1@asix.com.tw

To Address 2: to2@asix.com.tw

To Address 3: to3@asix.com.tw

Security: SSL SMTP Security Port: 465

Event Enable/Disable

IP Change: Disable Cold Start: Disable

Password Change: Disable

Authentication Fail: Disable

User Name: user@asix.com.tw Password: password

MODBUS Setting

Transfer Mode: Transparent TCP Server Port: 502

Response Timeout: 3000 10~65000 ms

Inter-Frame Delay: 10 10~500 ms

Inter-Character Delay: 10 10~500 ms

Firmware File: ota_r2w.bin

Submit Save Load



Device Setup ✕

Network Setting | **Serial Port Setting** | WiFi Setting | DHCP Server Setting | NTP Setting

Baud Rate	<input type="text" value="9600"/>
Data Bits	<input type="text" value="8"/>
Parity	<input type="text" value="None"/>
Stop Bits	<input type="text" value="1"/>
Flow Control	<input type="text" value="None"/>



Device Setup ✕

Network Setting | Serial Port Setting | WiFi Setting | DHCP Server Setting | NTP Setting

System Settings

Network Mode

AP Channel

Service Area Name/SSID

Security Mode

WEP Encryption Key Settings

Key Length

Key Index Select

Key Index 0

Key Index 1

Key Index 2

Key Index 3

Please enter 10-digit hex for 64-bit key length or 26-digit hex for 128-bit key length

AES/TKIP Encryption Key Settings

AES/TKIP Passphrase (8 ~ 63 digits)



Device Setup ✕

Network Setting | Serial Port Setting | WiFi Setting | DHCP Server Setting | NTP Setting

IP Pool Start Address	<input type="text" value="192 . 168 . 0 . 4"/>
IP Pool End Address	<input type="text" value="192 . 168 . 0 . 10"/>
Subnet Mask	<input type="text" value="255 . 255 . 255 . 0"/>
Default Gateway	<input type="text" value="192 . 168 . 0 . 3"/>
Lease Time	<input type="text" value="1440"/> minutes
Status	<input type="text" value="Enable"/> ▼



Device Setup ✕

Network Setting | Serial Port Setting | WiFi Setting | DHCP Server Setting | NTP Setting

NTP Server 1

NTP Server 2

NTP Server 3

Time Zone

RTC Time Setup

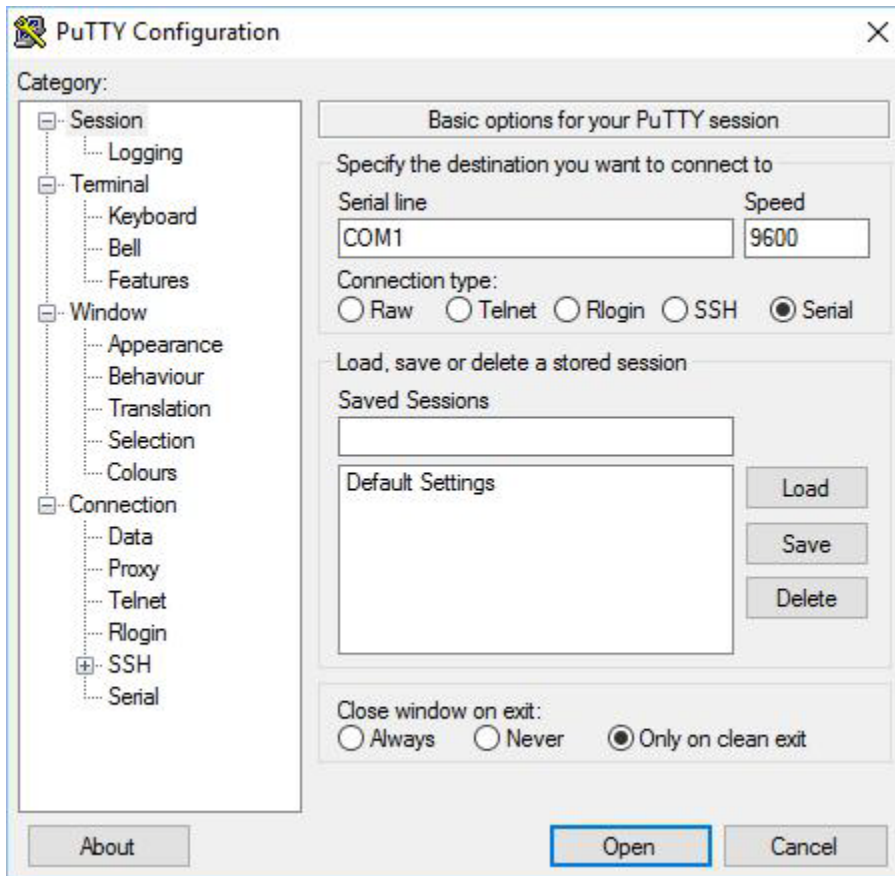
Daylight Saving Time

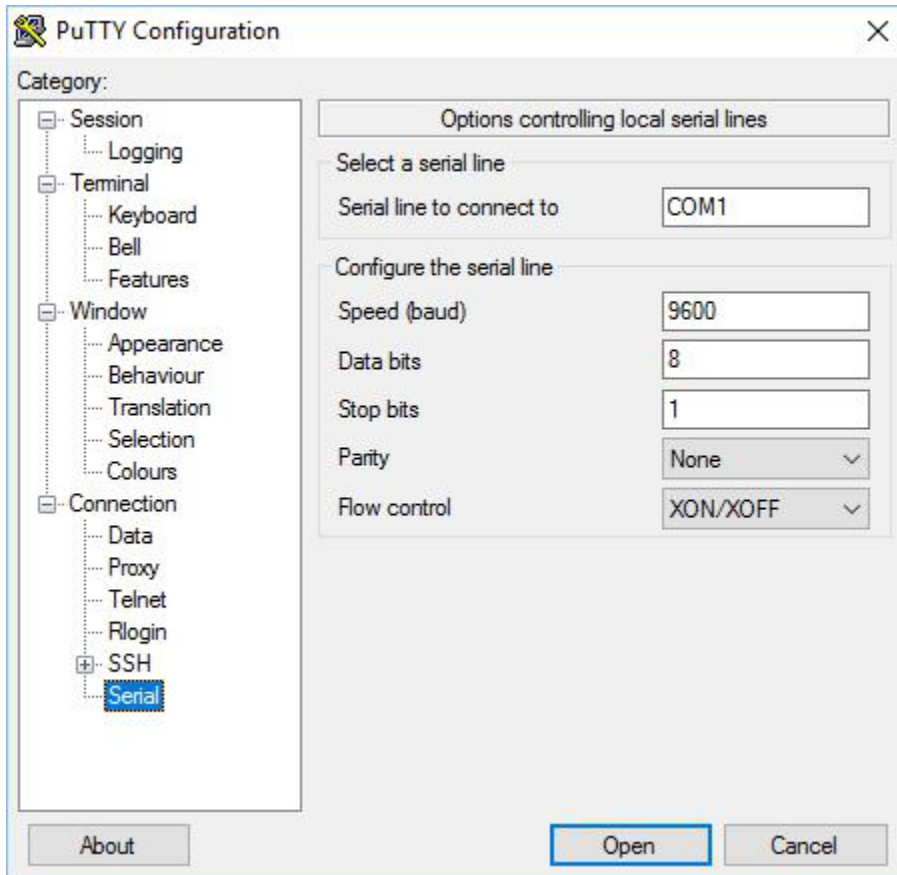


Configuring the parameters over the RS232 serial port

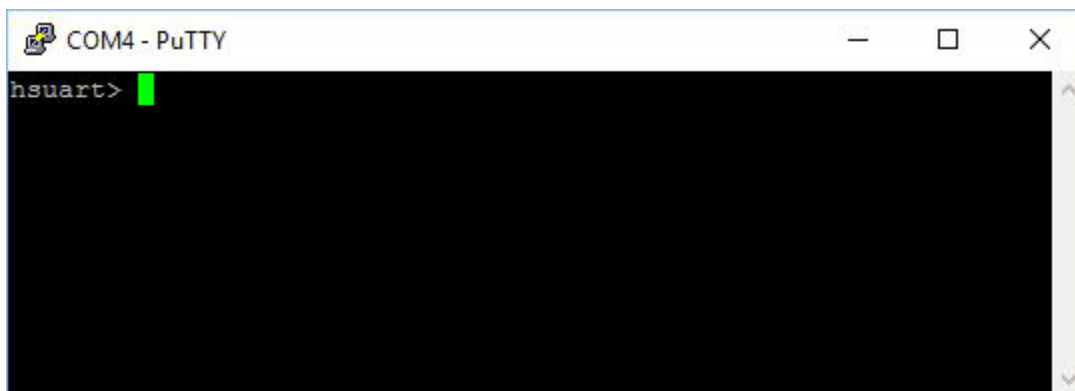
Connect the WA232E to your computer via the serial port.

Create a connection to the WA232E by using a terminal software such as Putty or Tera Term. Below is an example for the settings:





When the connection is established, enter +++ and press the Enter key on your keyboard to access the WA232E. (The +++ will not show up in TeraTerm's/PuTTY's window). NOTICE THAT ON SOME KEYBOARDS YOU NEED TO ENTER THE +++ AND PRESS ENTER BY USING THE MAIN KEYBOARD, NOT THE SMALL NUMBER PAD.



You are now ready to enter commands. Please refer to the datasheet for a complete list of commands, or enter 'help' to get the help menu.



Example for changing the IP address:

First use the “setip” command to set the desired IP address then use the “saveconfig” and “reboot” commands to save and reboot the adapter. After this you will need to login to the adapter again using the “+++” command. Once you are logged in you can check the new settings using the “ipconfig” command.

```
COM4 - PuTTY
hsuart> setip 192.168.0.5
Ok
hsuart> saveconfig
Ok
hsuart> reboot
System reboot!
█
```



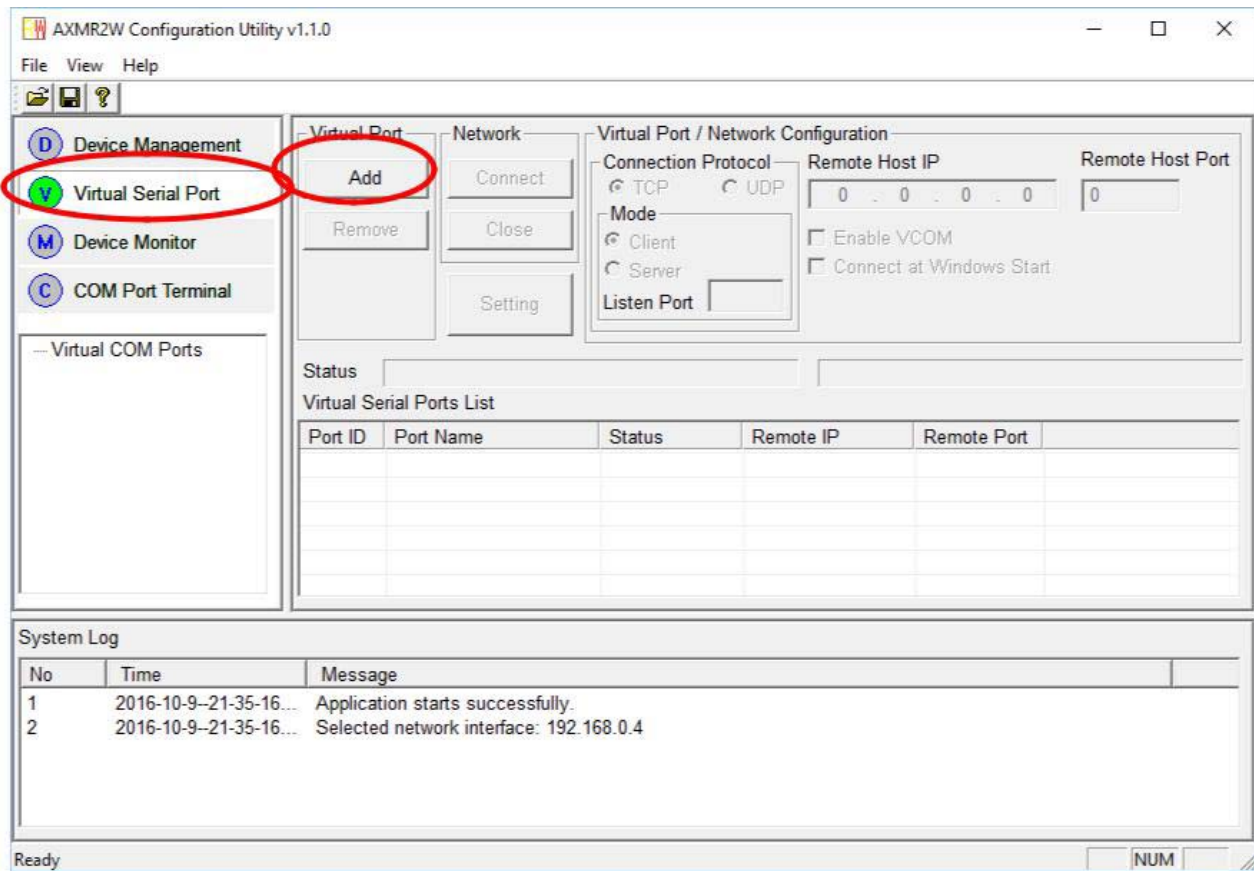

Creating a virtual COM port with the software utility

A virtual COM port can be created by using the AXMR2W Configuration Utility or it can be created by using alternative VCOM software such as PortShare, Fabulatech or USC-VCOM as described later in this setup guide.

First we show how to create a virtual COM port with the included configuration utility.

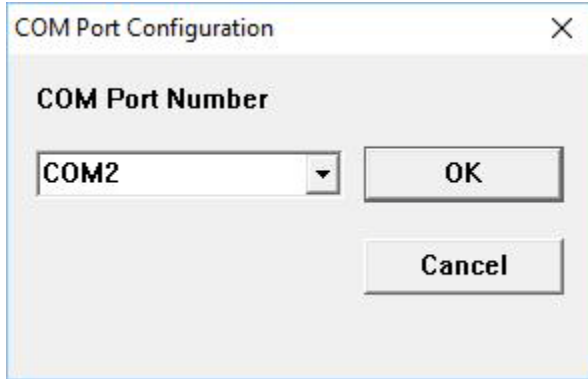
Make sure the WA232E is connected to the WiFi network.

Go to the “Virtual Serial Port” menu and click the “Add” button:

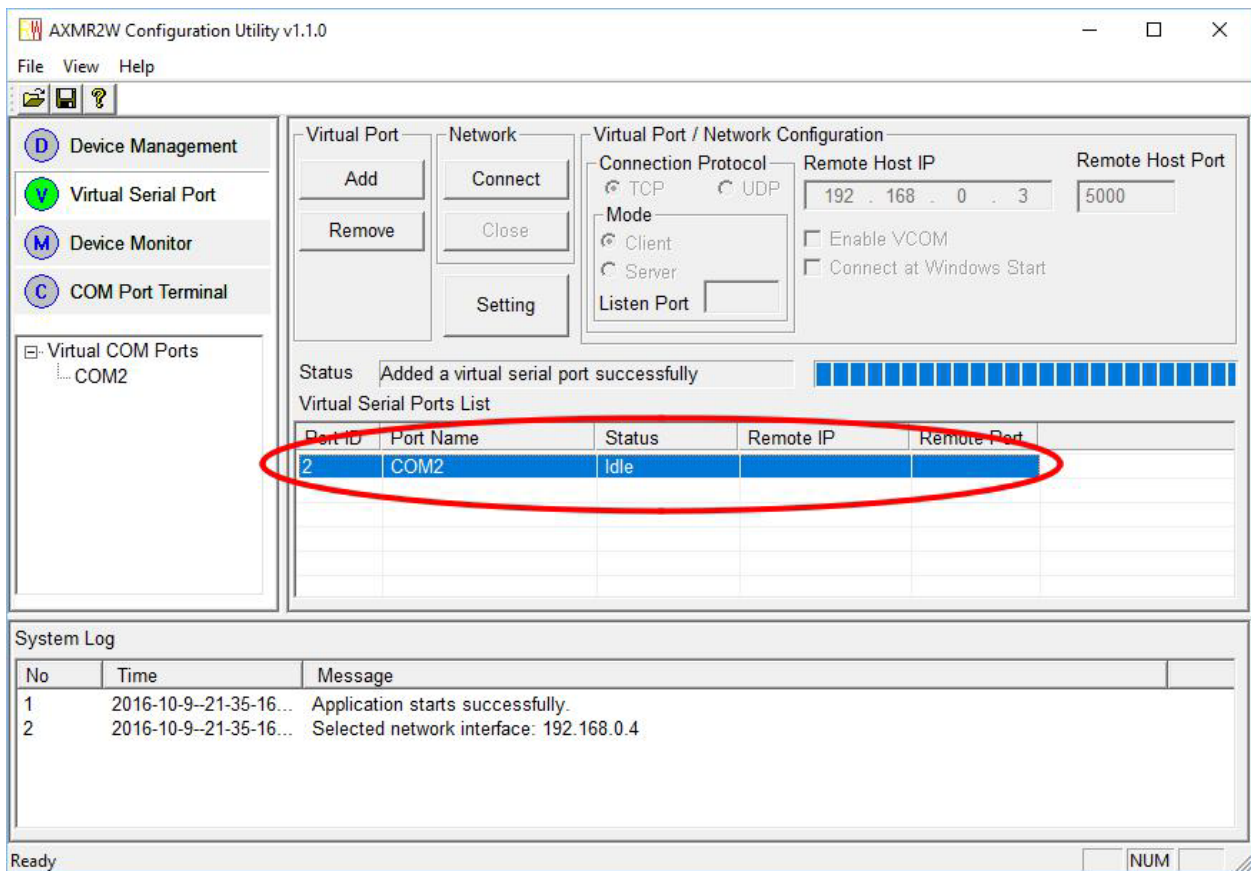




Select a COM port number:

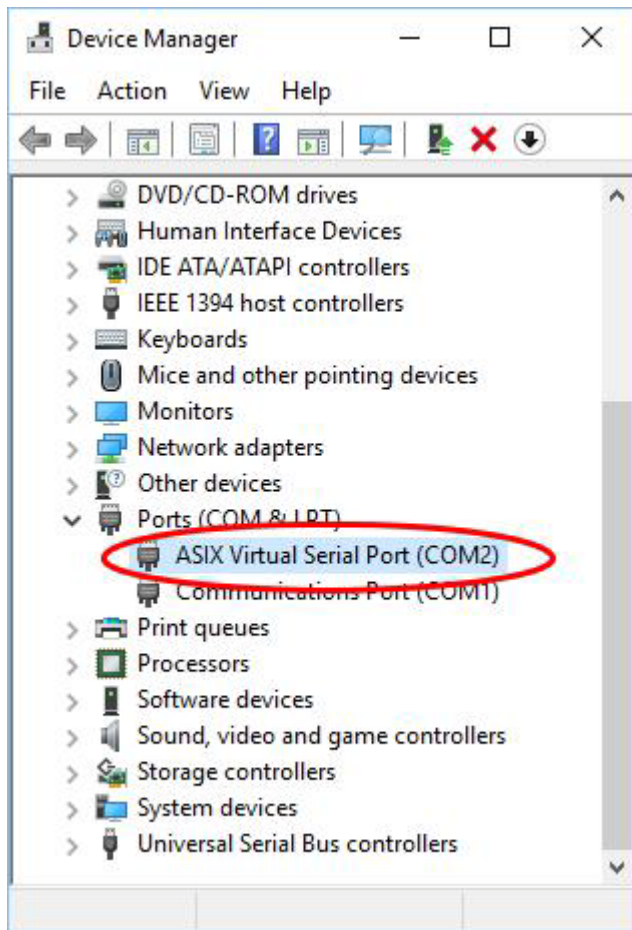


The COM port should now be listed in the Virtual Serial Ports List:



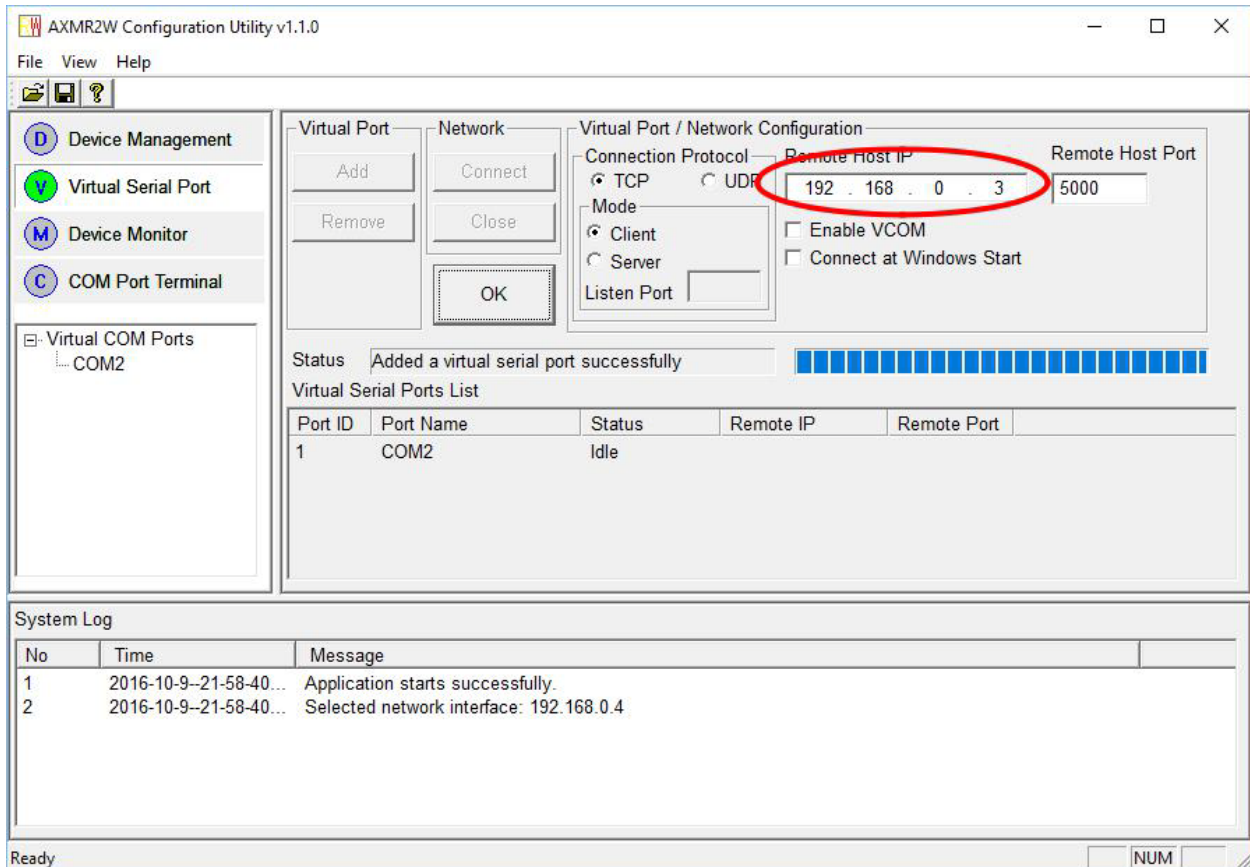


Check in Windows Device Manager to see if the COM port has been successfully created:



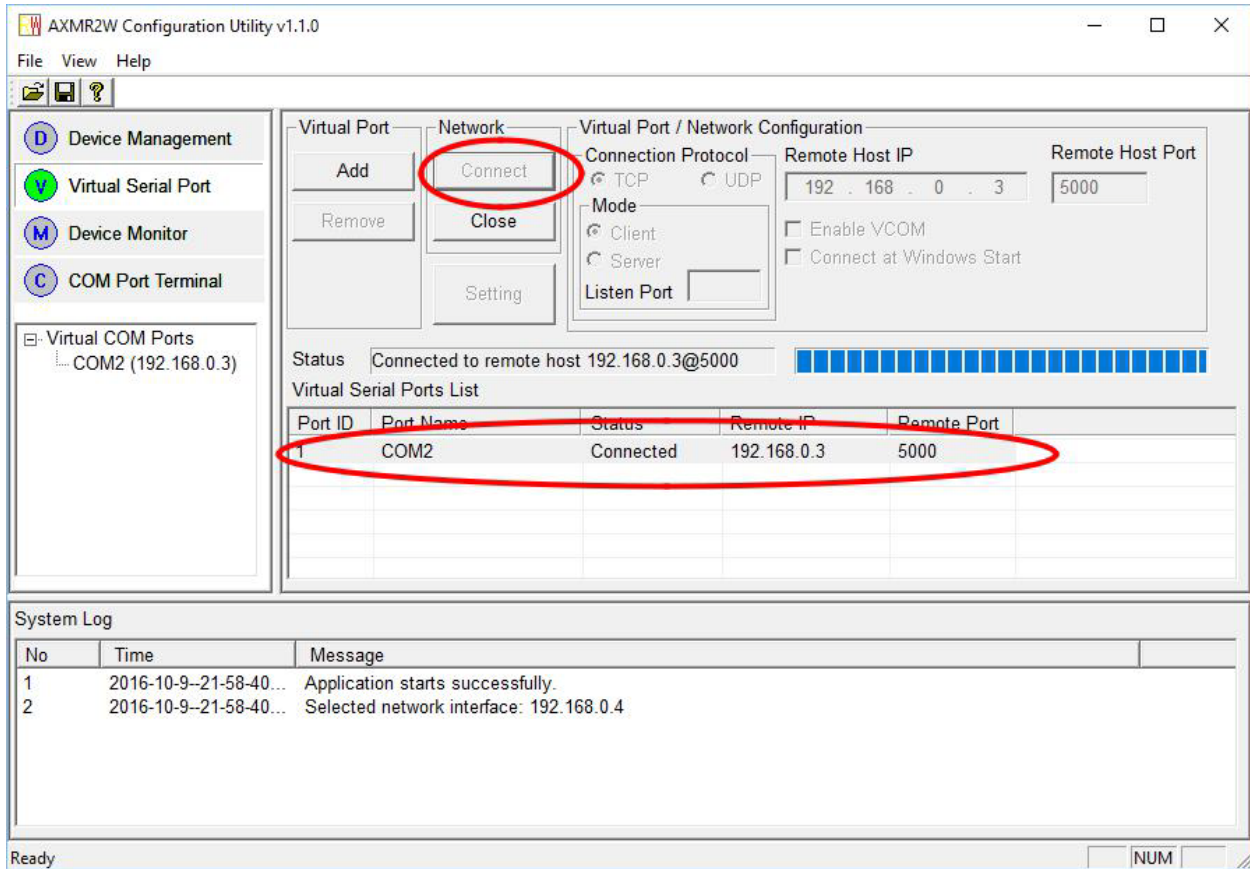


Click the “Setting” button and make sure the adapter’s IP address is entered in the “Remote Host IP” field, and click OK.





Click the "Connect" button and the software will open the COM port, ready to send and receive data.





Verifying communication with a loop-back test

To check if the WA232E can send and receive data successfully you can make a loop-back test using AccessPort (can be downloaded from www.usconverters.com).

First loop-back the TX pin (pin 2) to the RX pin (pin 3) in the WA232E's DB9 connector by placing a jumper (for example a paperclip) between the TX and RX pins:





Open AccessPort and set the parameters as shown below:

Options [X]

General
Event Control
Flow Control
Timeout Control
Monitor Control

General

Custom Baud Rate
 Enable 115200

Serial Port Settings
Port: COM2
Baud Rate: 9600
Parity Bit: NONE
Data Bit: 8
Stop Bit: 1
Buffer Size: 8192

Send display Receive display
 Char Format Char Format
 Hex Format Hex Format

AutoSend
 Enable auto send Cycle 200 ms

Advanced
 Auto open port when application start
 Prompt for saving when application exit
 Remind me when update is available

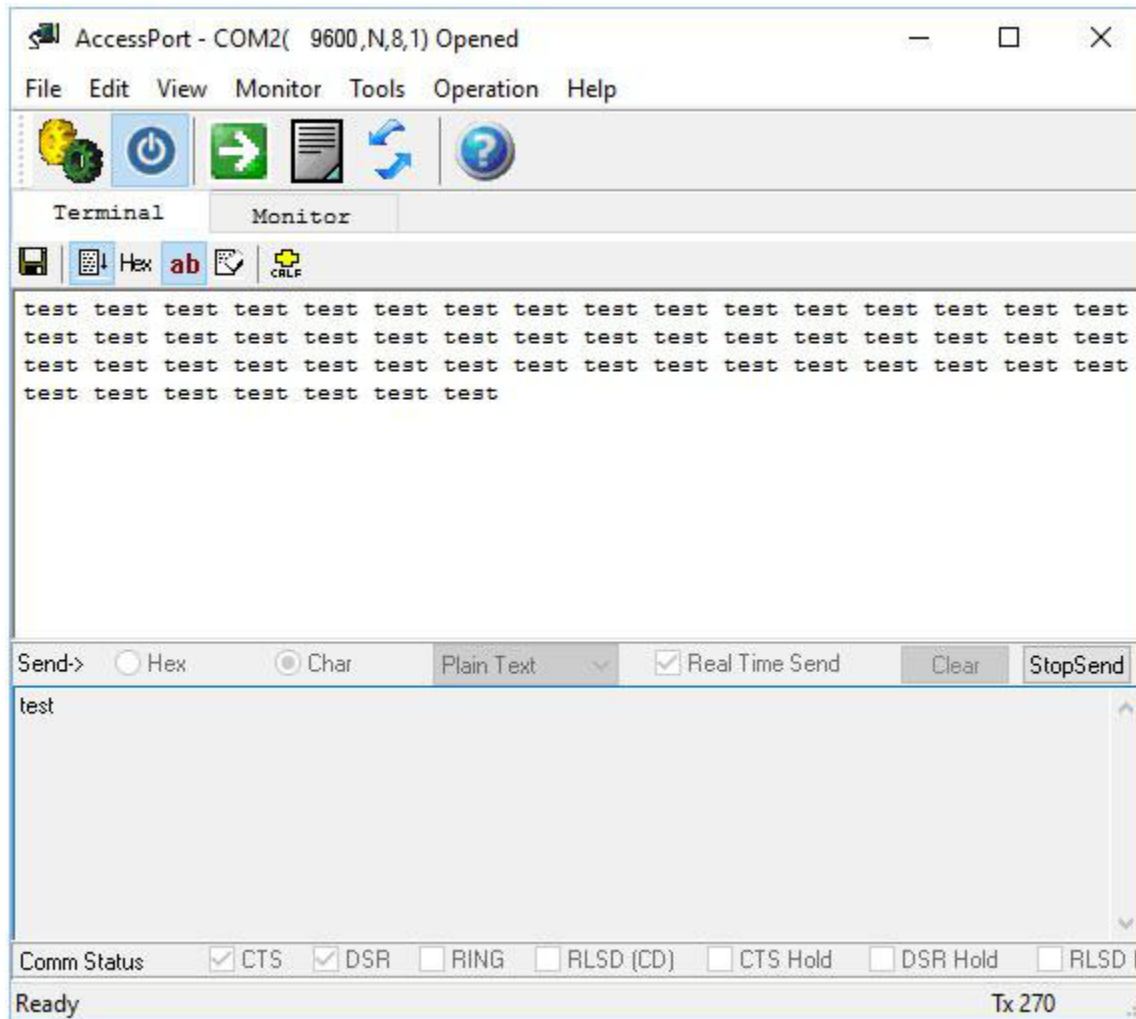
OK
Cancel



Enter a text string in the lower (send) window.

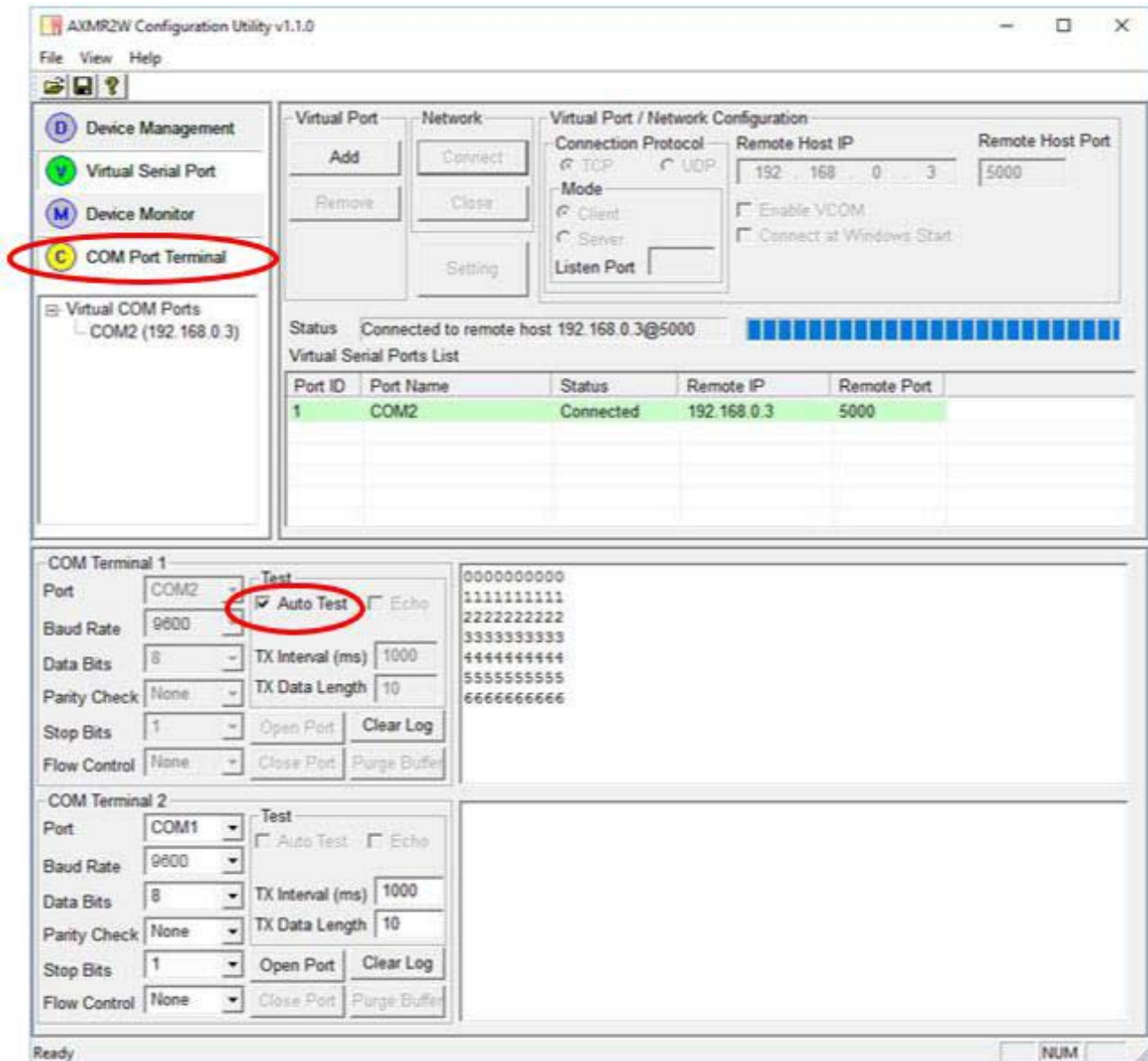
Click the "ON" button to open the COM port.

Click "AutoSend". The text string should now be sent to the WA232E, out on the TX pin and back through the jumper on the RX pin and appear in the upper (receive) window:





Alternatively a similar test can be made with the built-in COM terminal. Enable “Auto Test” and the software will send out test strings on the TX line:



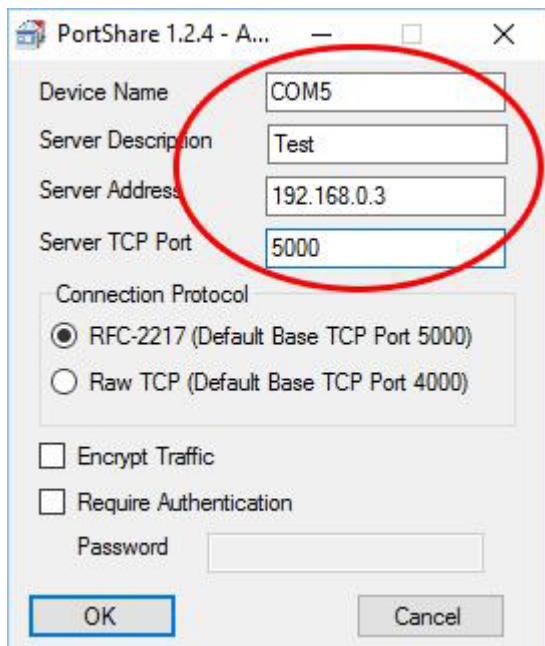


Creating a virtual COM/TCP port - example using PortShare

When creating a virtual COM port, an alternative to using the software utility for the WA232E is using a COM port redirector called PortShare. PortShare can be downloaded for free at www.usconverters.com.

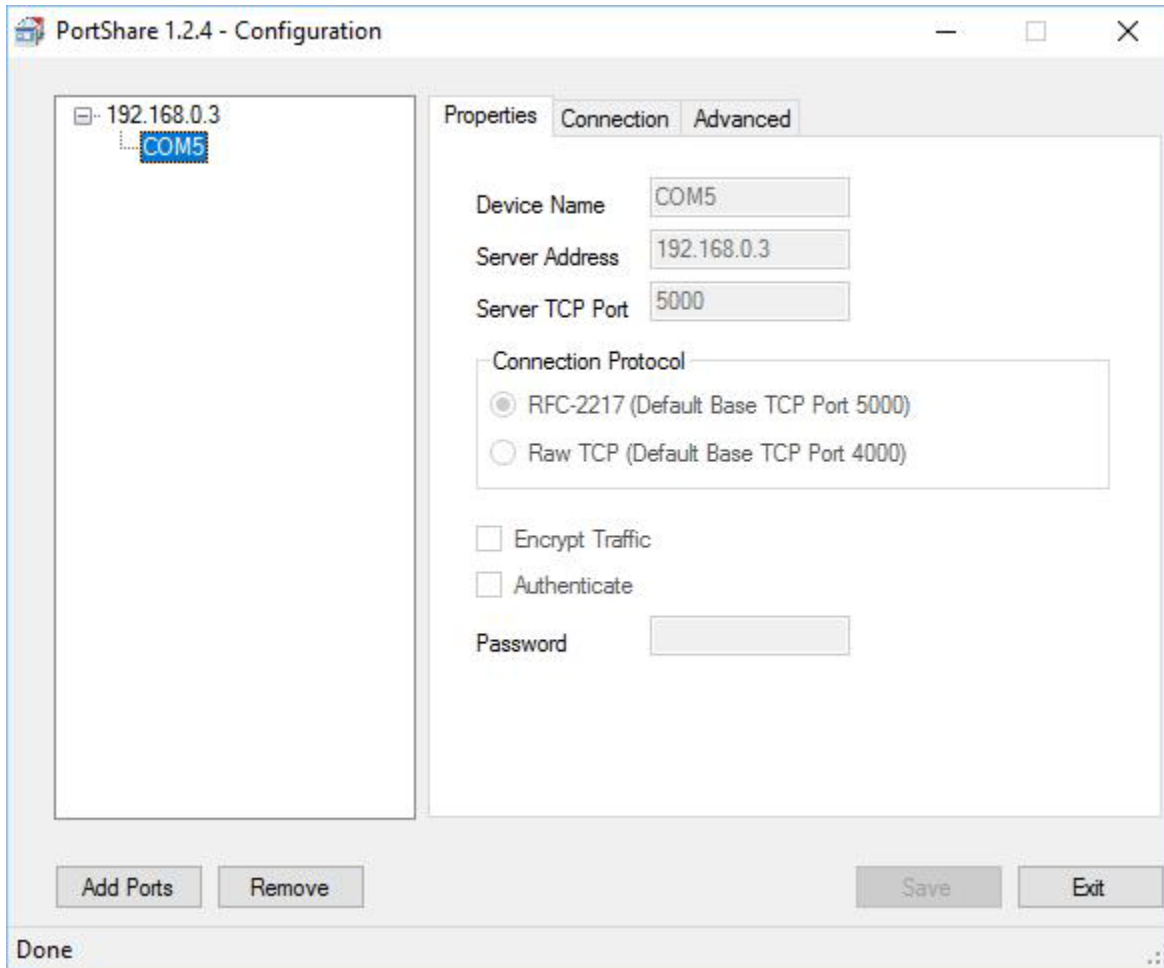
First make sure that the WA232E has joined the network.

Start PortShare and enter the settings of the WA232E as shown below:



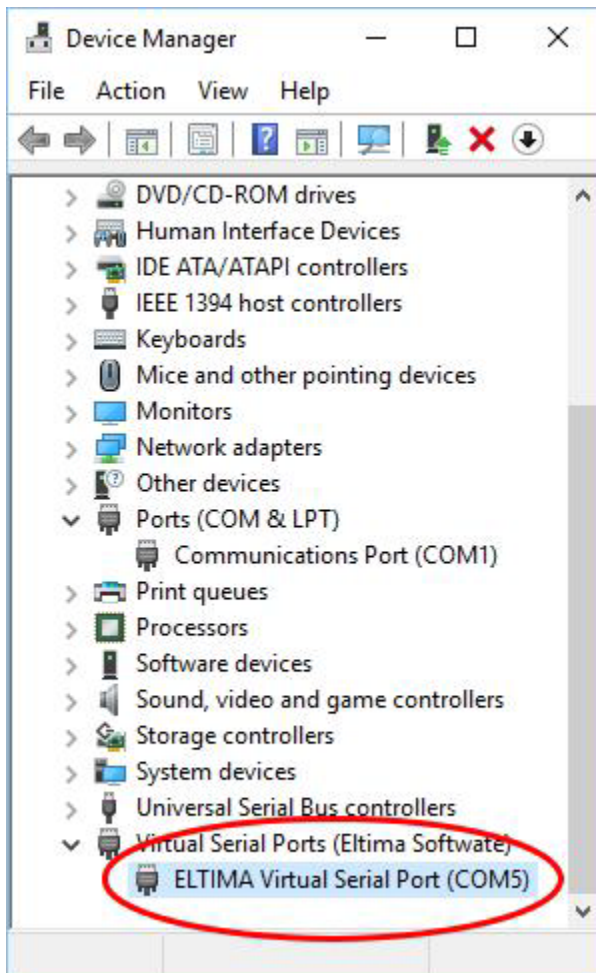


Default settings can usually be used without problems. PortShare will in this example create COM 5:





COM port 5 is now available in Device Manager, under “Virtual Serial Ports” in Windows 10. In older Windows versions the COM port may be listed under “Ports (COM & LPT)”:



To verify that the created virtual COM port can communicate properly with the WA232E you can make a loopback test as described earlier in this guide in the section called “Verifying communication with a loopback test”.

Alternative compatible Virtual COM/TCP software is:

Fabulatech Serial Port Redirector: <http://www.fabulatech.com/serial-port-redirector.html>

and

Eltima Serial over Ethernet: <http://www.eltima.com/products/serial-over-ethernet/>

These alternative solutions are good products and offers a 30 day trial period.



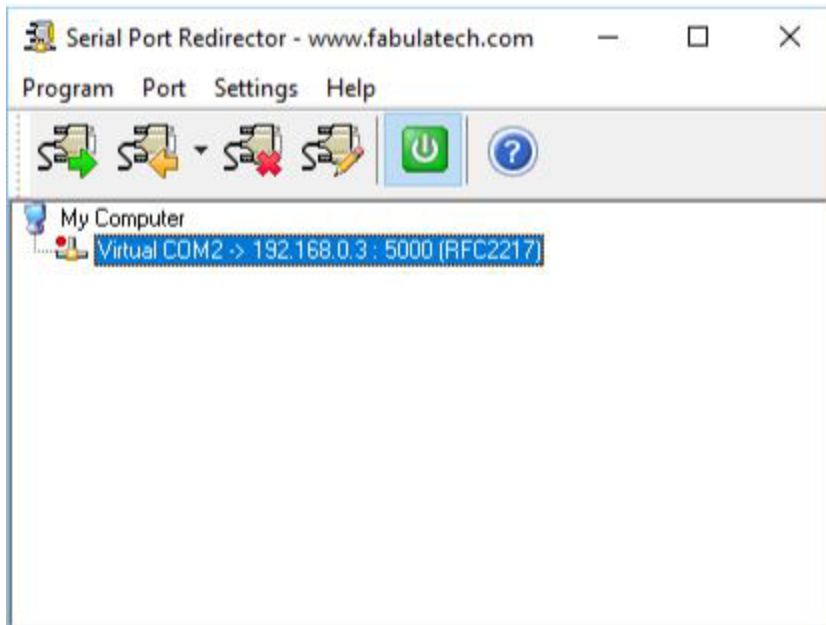
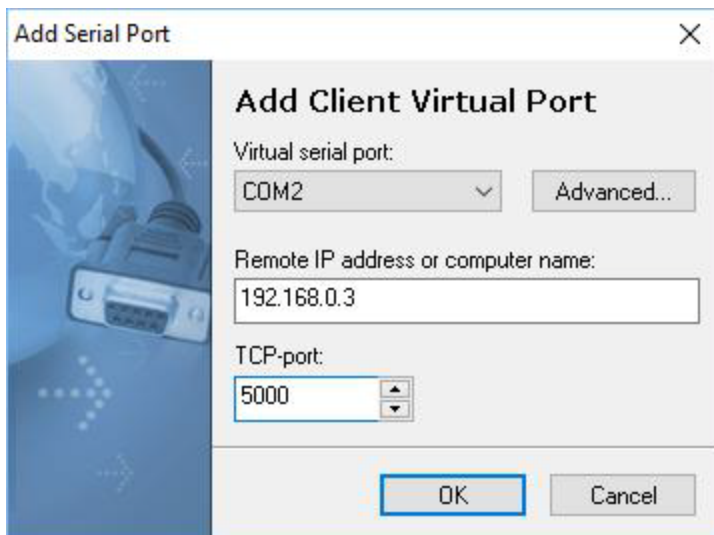
Creating a virtual COM/TCP port - example using Fabulatech

Fabulatech's "Serial Port Redirector" is compatible with the WA232E and an excellent alternative to creating a virtual COM port.

A 15-day trial software can be downloaded from www.fabulatech.com.

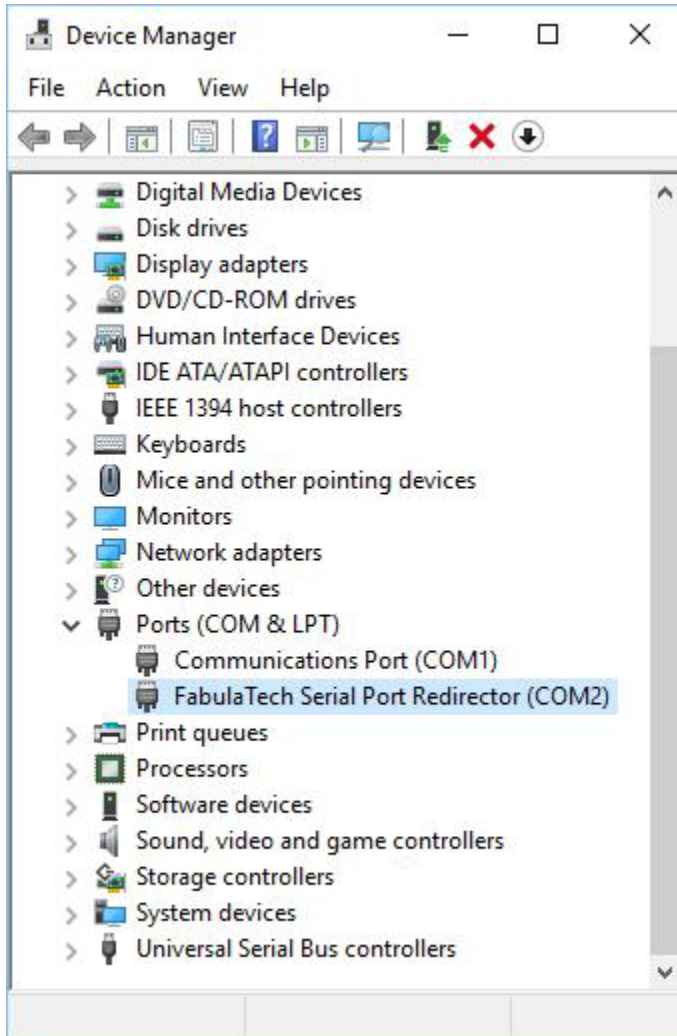
Here is a quick overview of what the Fabulatech COM port redirector software looks like:

Enter the COM port number and the IP address of the WA232E



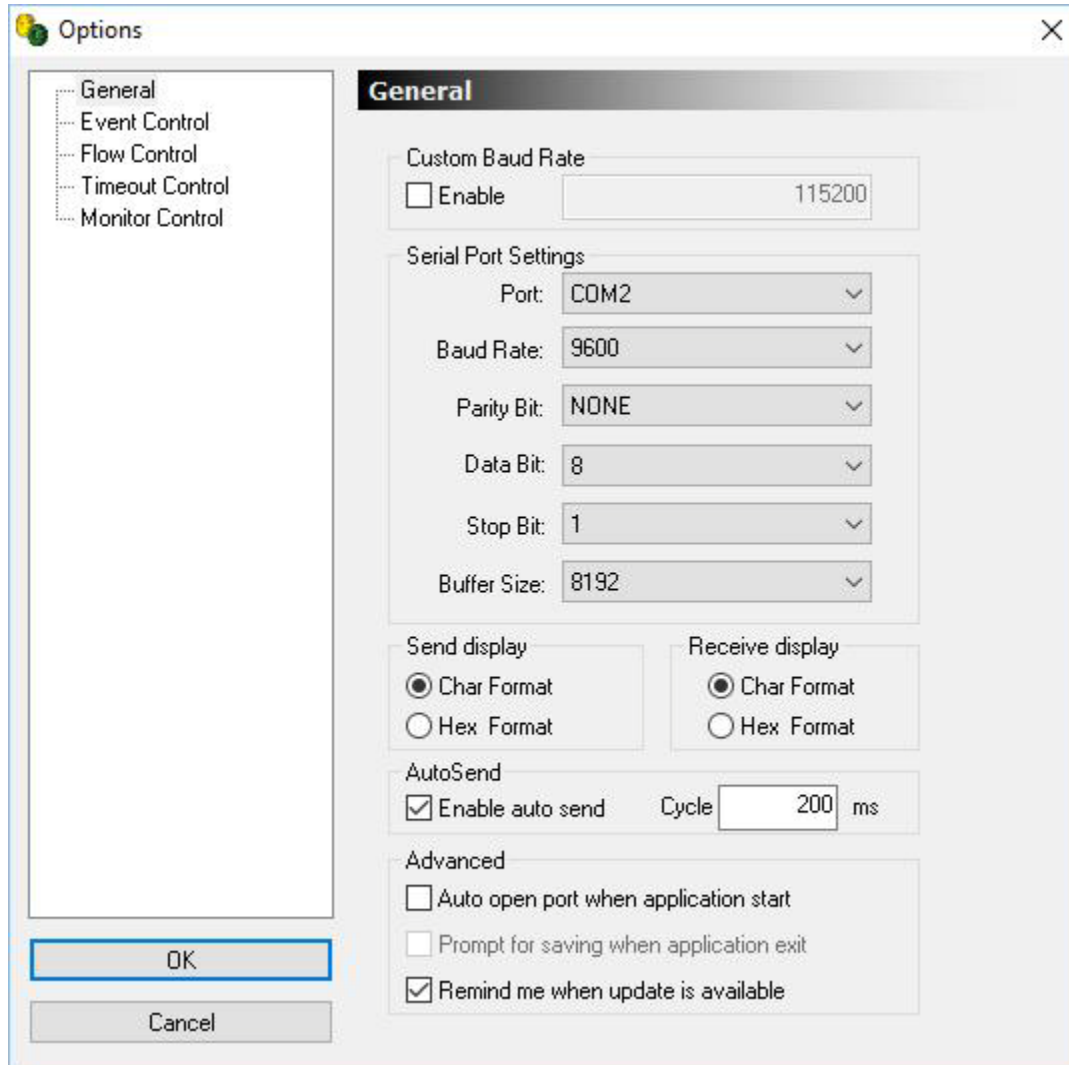


The COM port is now available in Windows Device Manager:



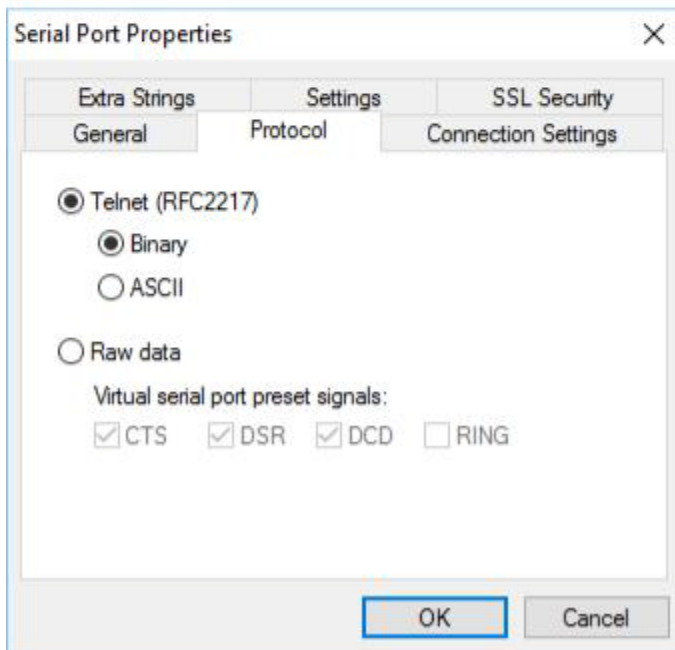
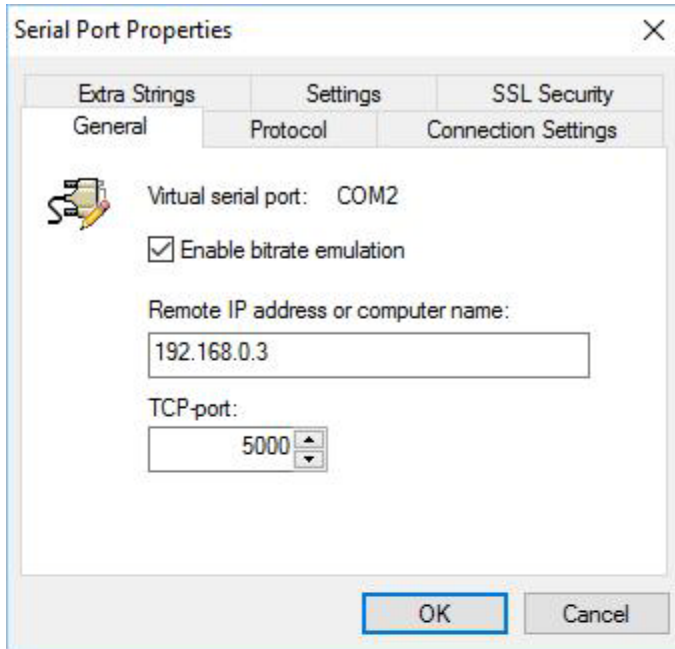


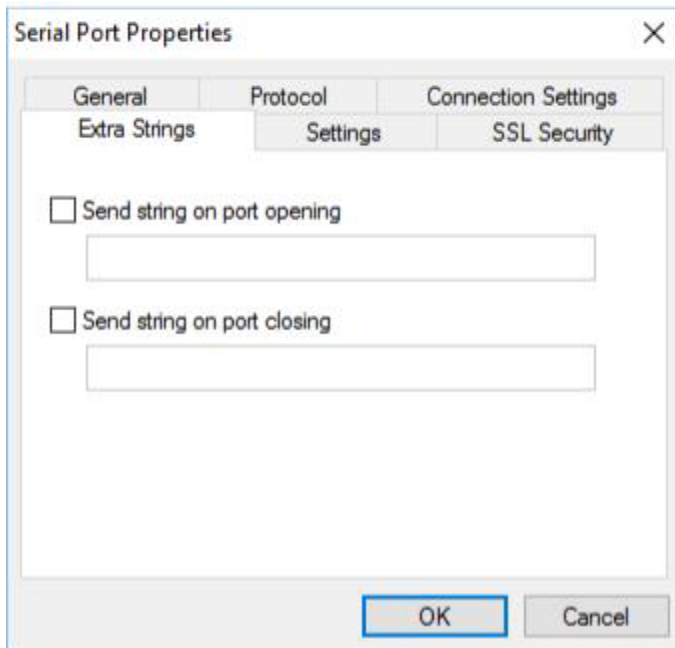
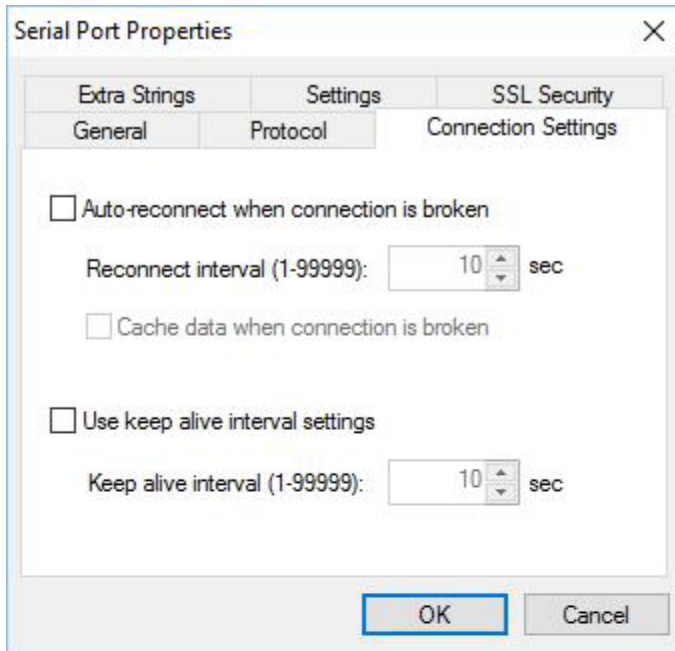
Check the COM port with AccessPort:

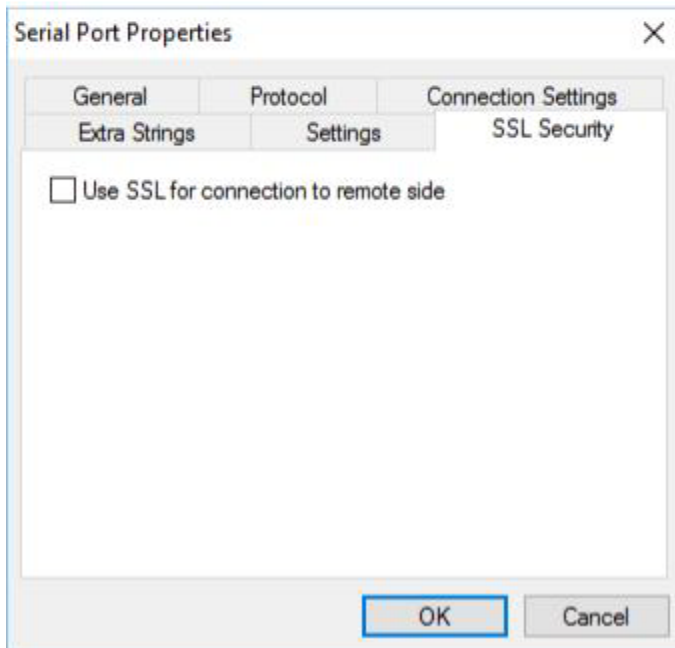
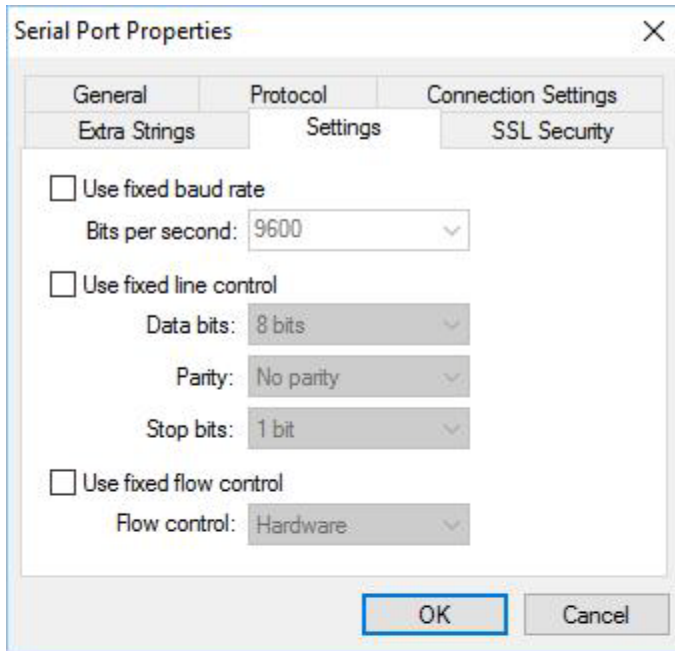




The following shows Fabulatech's COM port redirector's available settings:



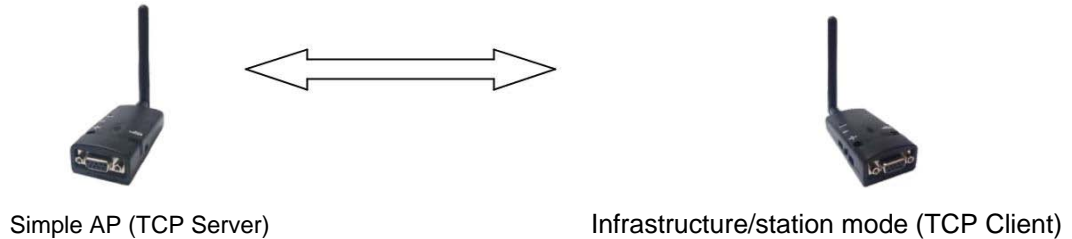






Point-to-point setup

The WA232E can be configured to communicate in pairs between two serial ports, also called point-to-point communication.



The Server adapter (configured as an Access Point by default) is using **all default settings** as shown below:

The screenshot shows a web browser window with the URL <http://192.168.0.3/basic.htm>. The page title is "Basic". The settings are as follows:

Serial Settings	
Device Name:	DSM1 <small>Device name can be up to 16 characters.</small>
Data Baud Rate:	9600
Data Bits:	8
Data Parity:	None
Stop Bits:	1
Flow Control:	None
RS485:	Disable

Serial to Network Settings	
Operation Mode:	Socket
Connection Type:	TCP
Transmit Timer (ms):	100 <small>Please enter an integer between 10-65535.</small>
Server/Client Mode:	Server
Server Listening Port:	5000 <small>Please enter an integer between 1024-65535.</small>
TCP Server Connections:	1 <small>This is effective only for TCP server under Socket or VCOM mode.</small>
Client Destination Host Name/IP:	192.168.0.2 <small>Please enter host name or IP address(e.g. google.com or 10.4.1.100).</small>
Client Destination Port:	5000 <small>Please enter an integer between 1024-65535.</small>

Static IP Settings	
Static IP Address:	192.168.0.3
Static Default Gateway:	192.168.0.1
Static Subnet Mask:	255.255.255.0
Static DNS Server:	168.95.1.1

DHCP Settings	
DHCP Client:	Disable
DHCP Server:	Enable



The other adapter must be configured as a Client in STA (Station) mode, with its host IP address set as the same as the Server's IP address, which is 192.168.0.3 and port 5000:

Serial Settings

Device Name: DSM1
Device name can be up to 16 characters.

Data Baud Rate: 9600

Data Bits: 8

Data Parity: None

Stop Bits: 1

Flow Control: None

RS485: Disable

Serial to Network Settings

Operation Mode: Socket

Connection Type: TCP

Transmit Timer (ms): 100
Please enter an integer between 10~65535.

Server/Client Mode: Client

Server Listening Port: 5000
Please enter an integer between 1024~65535.

TCP Server Connections: 1
This is effective only for TCP server under Socket or VCOM mode.

Client Destination Host Name/IP: 192.168.0.3
Please enter host name or IP address(e.g. google.com or 10.4.1.100).

Client Destination Port: 5000
Please enter an integer between 1024~65535.

Static IP Settings

Static IP Address: 192.168.0.3

Static Default Gateway: 192.168.0.1

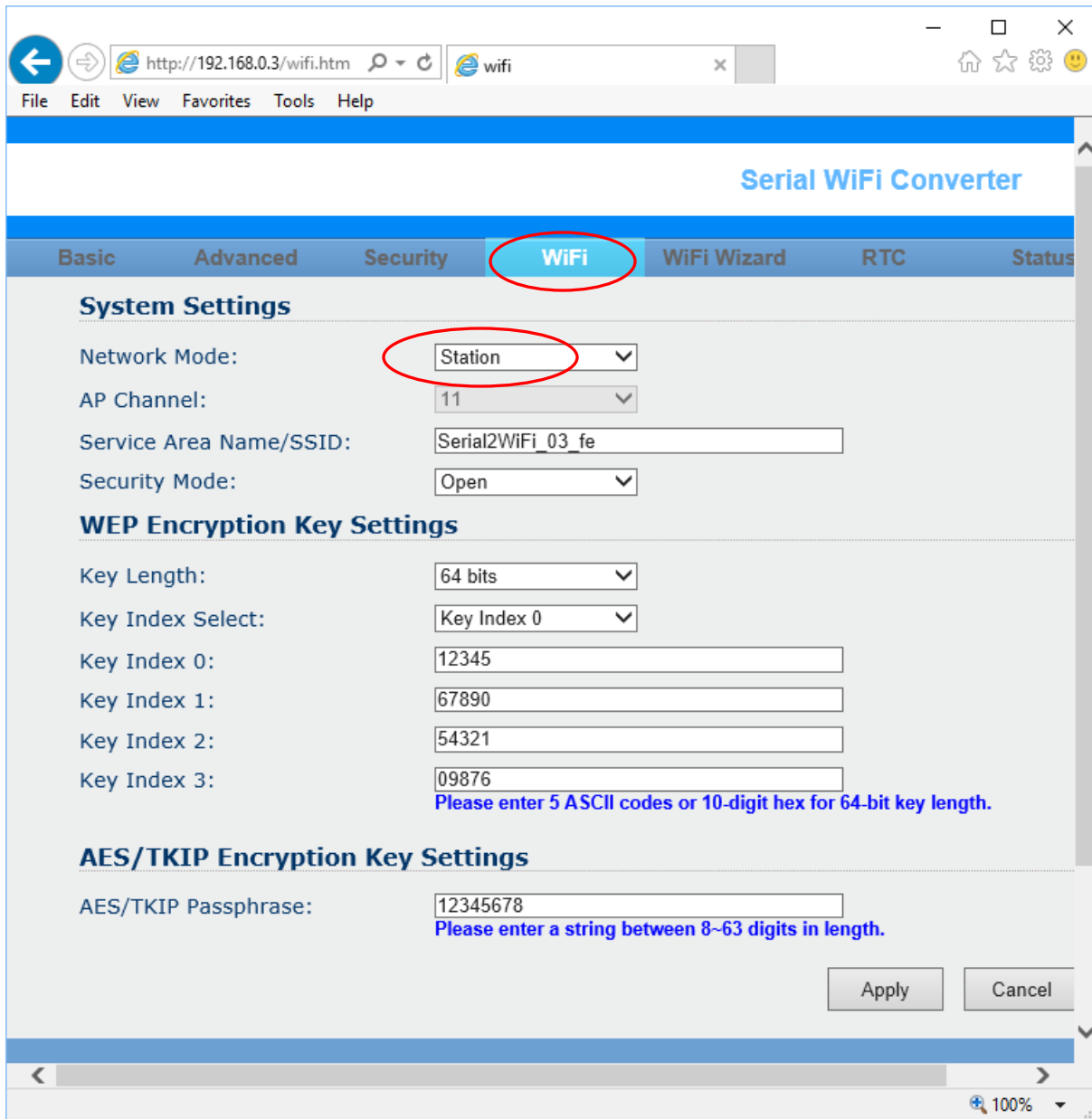
Static Subnet Mask: 255.255.255.0

Static DNS Server: 168.95.1.1

DHCP Settings

DHCP Client: Disable

DHCP Server: Enable

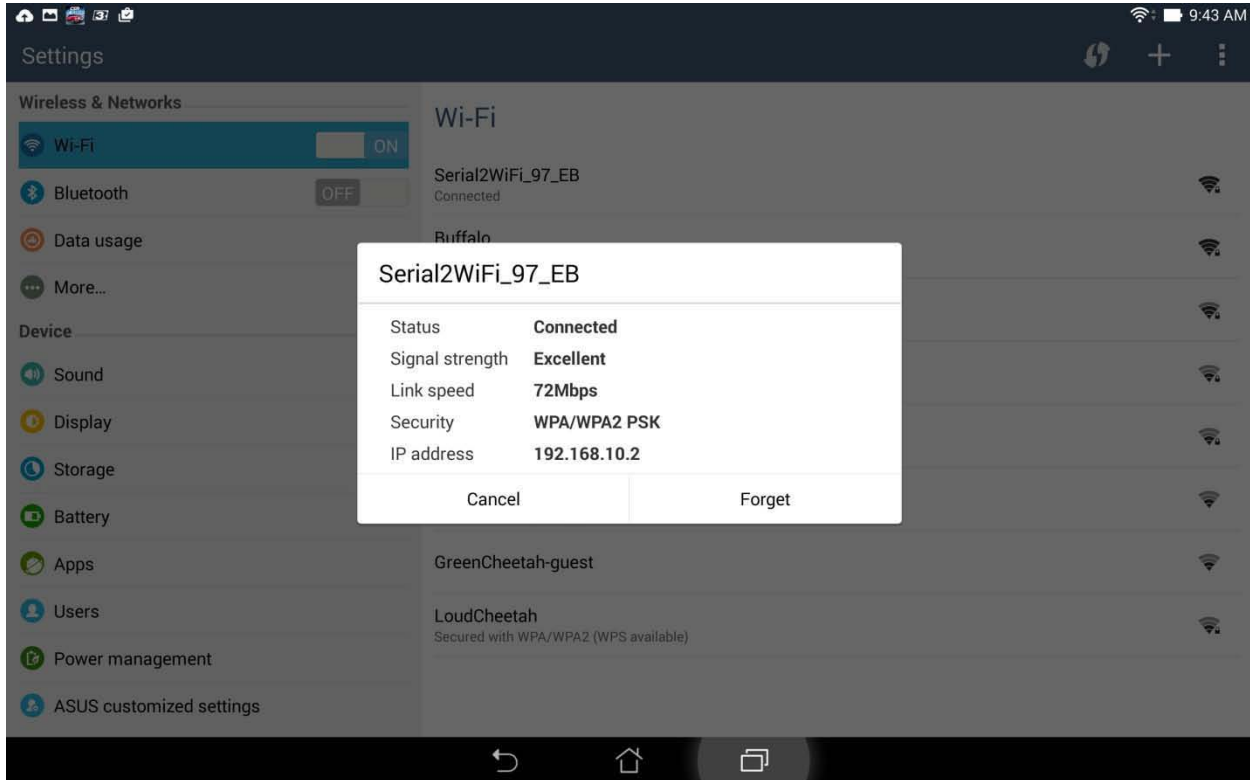


Now save the settings and restart the adapter. The Client adapter should now connect with the Server adapter automatically.



Connecting with Android

Connecting and communicating with the WA232E using an Android tablet is easy. Simply search for the WA232E using the tablet's built-in WiFi manager and connect to the WA232E:



You can now login to the adapter's admin page using any web-browser.

A free terminal emulator APP for Android is offered from the Google Play store:

http://play.google.com/store/apps/details?id=com.ucconnect.uctcpipadapter_hex

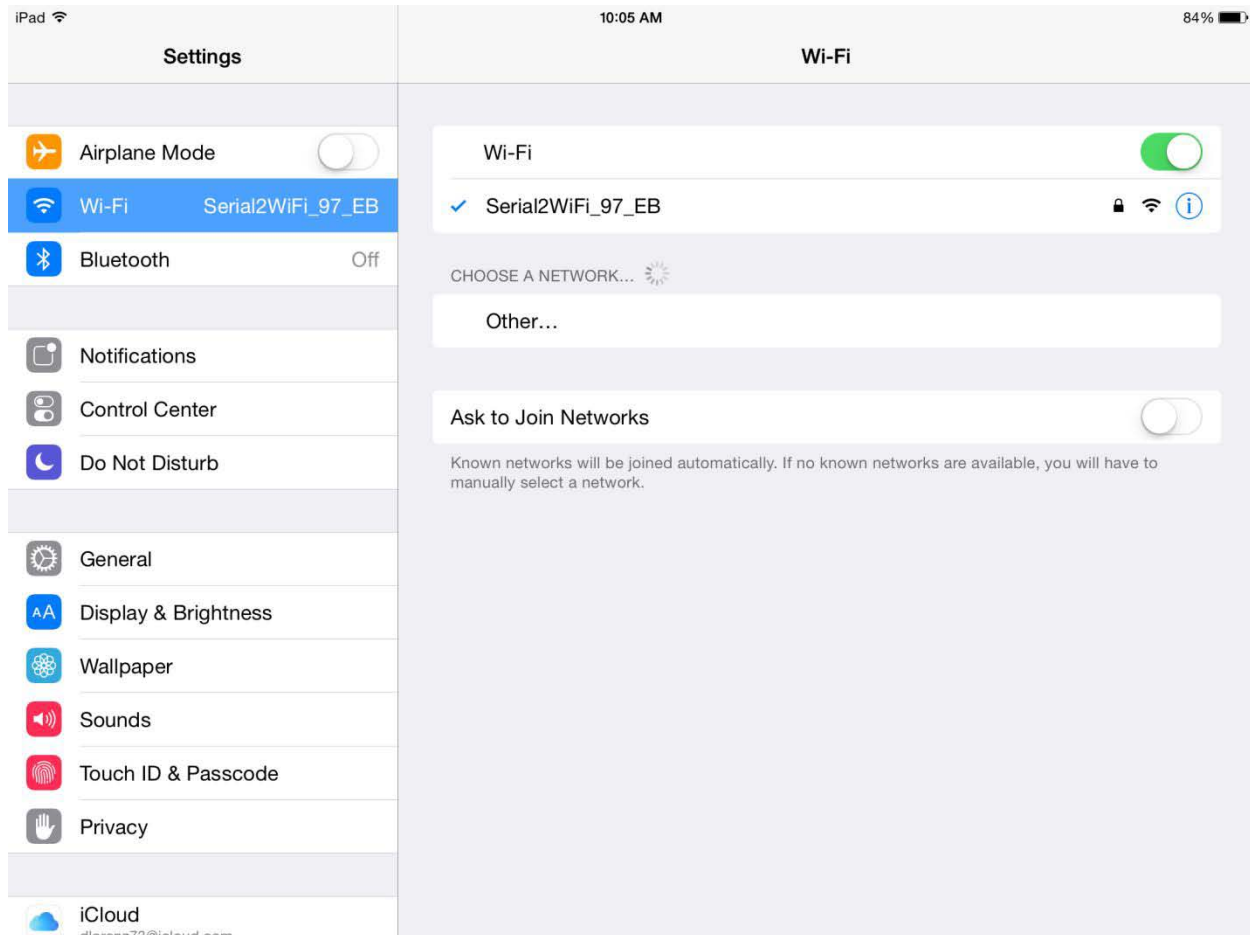
Most of the free serial terminals are compatible with the WA232E, simply search the Google Play Store for "Serial Terminal", see what is available and experiment with the various terminals until you find one you like.





Connecting with iOS

Connecting and communicating with the WA232E using an iPad table is easy. Simply search for the WA232E using the tablet's built-in WiFi manager and connect to the WA232E:



You can now connect to the WA232E's admin page by using a web-browser.

A free terminal emulator APP for iOS is offered from the iTunes store:

<https://itunes.apple.com/us/app/tcp-ip-to-serial-terminal/id1238054234?l=zh&ls=1&mt=8>

Most of the free serial terminals are compatible with the WA232E, simply search the Apple App Store for "Serial Terminal", see what is available and experiment with the various terminals until you find one you like.



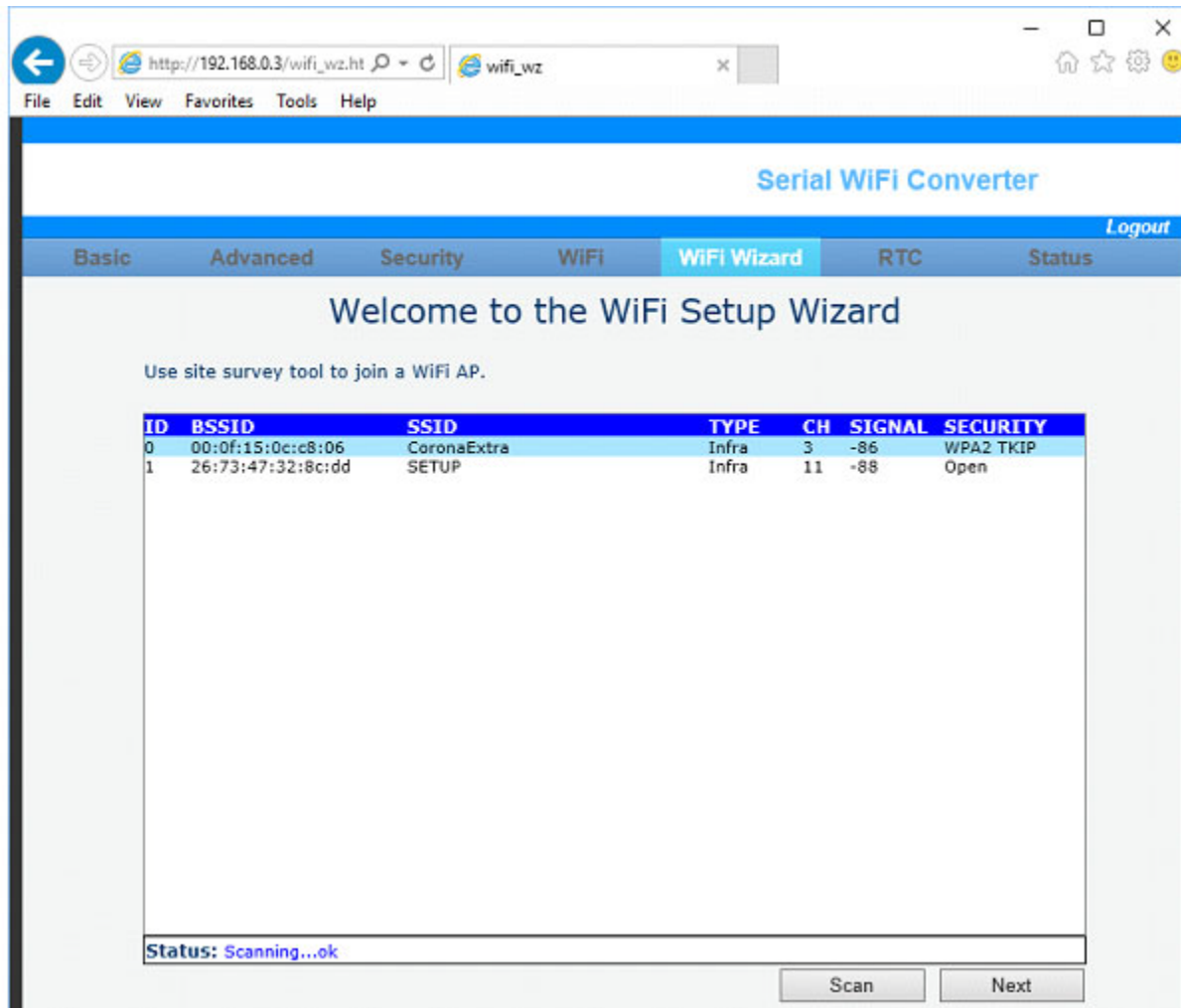


How to connect the WA232E using a wireless router

The setup looks like this:



First login to the WA232E using an access point (not the wireless router) as described earlier in this guide. Go to the “WiFi Wizard” screen, select the SSID you want to connect to and click the “Next” button:





Enter your security key:

The screenshot shows a web browser window with the address bar displaying `http://192.168.0.3/wifi_wz.ht`. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The page title is "Serial WiFi Converter". A navigation bar at the top contains tabs for Basic, Advanced, Security, WiFi, WiFi Wizard (selected), RTC, and Status, along with a Logout link. The main content area is titled "Enter WiFi Security Key" and includes the instruction: "Please enter a pre-share key between 8~63 digits in length." Below this, a "Pre-Share Key:" label is followed by a text input field containing the value "123456789". To the right of the input field are two buttons: "Next" and "Cancel".



Enable DHCP or give the WA232E a static IP address and click the "Accept" button:

The screenshot shows a web browser window with the URL `http://192.168.0.3/wifi_wz.ht`. The page title is "Serial WiFi Converter" and the current tab is "wifi_wz". The navigation menu includes "Basic", "Advanced", "Security", "WiFi", "WiFi Wizard" (selected), "RTC", and "Status". A "Logout" link is also present. The main content area displays the following settings:

Service Area Name/SSID:	CoronaExtra
AP Channel:	3
Security Mode:	WPA/WPA2 AES
DHCP Client:	Enable ▾
Static IP Address:	192.168.0.3
Static Default Gateway:	192.168.0.1
Static Subnet Mask:	255.255.255.0
Static DNS Server:	168.95.1.1

At the bottom right, there are two buttons: "Accept" and "Cancel". The "DHCP Client" dropdown menu is circled in red.



To check and verify if the WA232E has joined the network successfully you may be able to login to your wireless routers admin status page and see what IP address has been assigned to the WA232E:

The screenshot shows the web interface of an Icotera IGW3000 Residential Gateway. The browser address bar shows `http://192.168.1.1/index.cgi`. The interface has a green header with the Icotera logo and the model name. Below the header are navigation tabs for Wi-Fi, Network, System, and Status. The 'Network' tab is active, and within it, the 'IP' sub-tab is selected. The 'Configuration' section shows DHCP server settings with fields for IP type (DHCP server), IP address (192.168.1.1), IP Netmask (255.255.255.0), Gateway (192.168.1.1), Wins (0.0.0.0), Primary DNS (192.168.1.1), Secondary DNS (192.168.1.1), IP range (192.168.1.100 - 192.168.1.254), Lease time (43200), and Max lease time (43200). Below this is the 'DHCP' section with a 'Dynamic Leases' table. The table has columns for IP Address, MAC Address, Hostname, and Expires. The first row, with IP 192.168.1.104 and MAC 00:0E:C6:40:03:FE, is circled in red. Other rows include 192.168.1.131 (DML-PC), 192.168.1.179 (DESKTOP-ILSQPOE), 192.168.1.123 (iPad), 192.168.1.143 (NETGEM-5fdcd1), and 192.168.1.100 (0005CD640000). A 'Reload' button is at the bottom of the table.

IP Address	MAC Address	Hostname	Expires
192.168.1.104	00:0E:C6:40:03:FE	*	2017/02/11 07:12
192.168.1.131	C8:60:00:8C:60:96	DML-PC	2017/02/11 04:09
192.168.1.179	A4:34:D9:A1:92:8A	DESKTOP-ILSQPOE	2017/02/11 06:59
192.168.1.123	78:7E:61:E6:2C:EF	iPad	2017/02/11 06:53
192.168.1.143	00:04:30:5F:DC:D1	NETGEM-5fdcd1	2017/02/11 06:48
192.168.1.100	00:05:CD:64:00:00	0005CD640000	2017/02/11 04:04

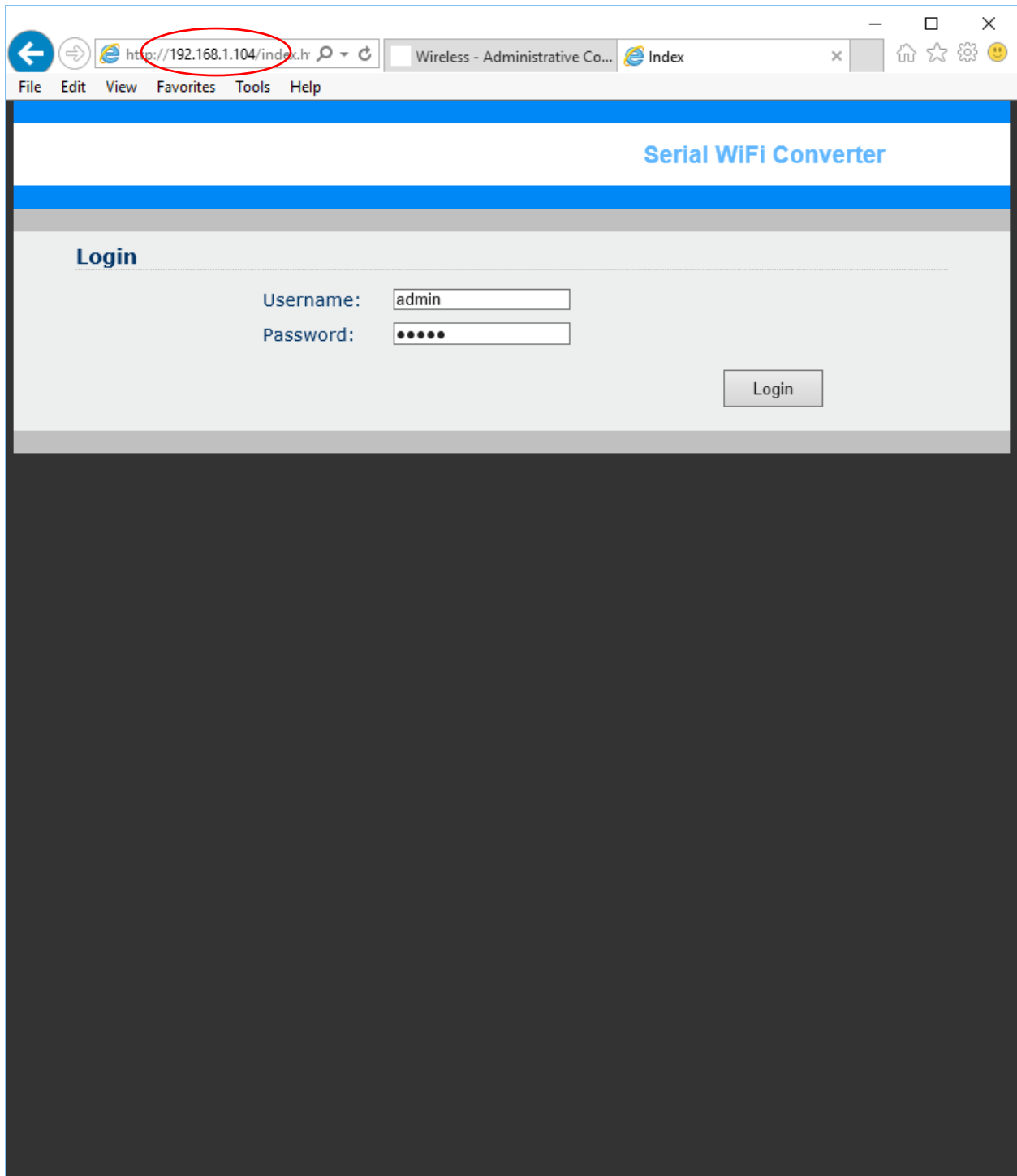


If logging into your wireless router is not an option then you can find the WA232E's IP address with an IP Scanner such as "Advanced IP Scanner", <http://www.advanced-ip-scanner.com/>

Status	Name	IP	Manufacturer	MAC address
>	192.168.1.1	192.168.1.1	Kjaerulff1 A/S	00:0F:15:0C:C8:05
>	0005CD640000.mydomain	192.168.1.100	Denon, Ltd.	00:05:CD:64:00:00
	192.168.1.104	192.168.1.104	ASIX ELECTRONICS ...	00:0E:C6:40:03:FE
	iPad.mydomain	192.168.1.123		78:7E:61:E6:2C:EF
>	DML-PC.mydomain	192.168.1.131		C8:60:00:8C:60:96
	NETGEM-5fdcd1.mydomain	192.168.1.143	Netgem	00:04:30:5F:DC:D1
	DESKTOP-ILSQPOE	192.168.1.179		A4:34:D9:A1:92:8A



You can now login to the WA232E using the new IP address:





The screenshot shows a web browser window with the URL <http://192.168.1.104/wifi.htn>. The page title is "Serial WiFi Converter" and it includes a "Logout" link in the top right. The navigation menu contains "Basic", "Advanced", "Security", "WiFi" (selected), "WiFi Wizard", "RTC", and "Status".

System Settings

- Network Mode: Station
- AP Channel: 11
- Service Area Name/SSID: CoronaExtra
- Security Mode: WPA/WPA2 Auto

WEP Encryption Key Settings

- Key Length: 64 bits
- Key Index Select: Key Index 0
- Key Index 0: 12345
- Key Index 1: 67890
- Key Index 2: 54321
- Key Index 3: 09876

Please enter 5 ASCII codes or 10-digit hex for 64-bit key length.

AES/TKIP Encryption Key Settings

- AES/TKIP Passphrase: 123456789

Please enter a string between 8-63 digits in length.

Buttons: Apply, Cancel



Troubleshooting / Known issues

Dropped connections or connection problems.

Using a serial WiFi adapter on a high traffic network with many WiFi and/or Bluetooth connections may sometimes be a challenge since all WiFi and Bluetooth devices share the same 2.4Ghz frequency. Sometimes this “noisy / busy” environment can cause problems connecting to the WA232E or it can cause dropped connections, so here are a few things you can try to improve the situation:

1. Try changing the wireless channel.
2. Try changing the wireless data rate. Lowering the data rate may help improve time-out issues.
3. If possible try and scan the 2.4Ghz spectrum. This can for example be done by using a 3rd party software such as:

inSSID:

<http://www.metageek.net/products/inssider/>

WiFi Stumbler:

[http://meraki.cisco.com/products/wireless/wifi-](http://meraki.cisco.com/products/wireless/wifi-stumbler)

stumbler For Android: WiFi Analyzer APP

Analyze the network and use the channel with the least number of other wireless devices.

1. Check the number of DHCP clients of your router if you use a wireless router. If the number of available IP addresses is less than the number of WA232E 's then they will disconnect randomly.
2. Make sure the WA232E's power supply is sufficient. We recommend 5VDC 1000mA USB power adapter, powered from a 120VAC-5VDC wall adapter.
3. Bandwidth of AP: If you connect using an external Access Point, please set 20 MHz bandwidth. 40 MHz may not work.



Federal Communications Commission (FCC) Statement

RADIO FREQUENCY INTERFERENCE STATEMENT

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS.

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED , INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE
OPERATION.

Tested to comply with FCC standards for home or office use