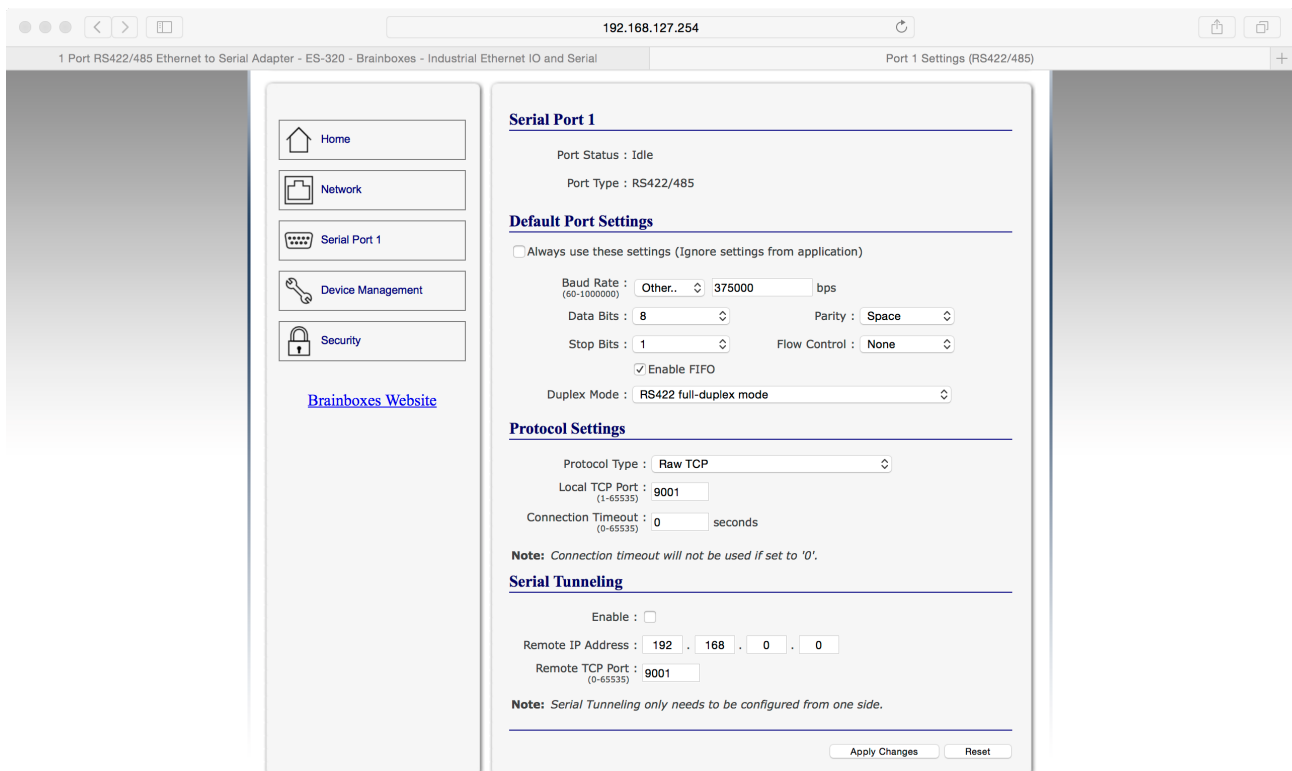


Wavetool instructions for connecting to Sennheiser EM-1046 by using Brainboxes ES-320 Ethernet to Serial adapter

1.

Connect Brainboxes ES-320 Ethernet - RS422 Serial Adapter to you Mac with ethernet cable and power it up. ES-320 will not need any drivers to be installed. We have tested Wavetool ONLY with Brainboxes ES-320. Set your computer network adapter IP address to be within the same subnet with ES-320 (For example 192.168.127.3). Open your web browser and type in ES-320 default IP address to web browser address bar (192.168.127.254). Configure your ES-320 to the following settings:



The screenshot shows the Wavetool web interface for configuring Serial Port 1. The browser address bar shows the IP address 192.168.127.254. The page title is "1 Port RS422/485 Ethernet to Serial Adapter - ES-320 - Brainboxes - Industrial Ethernet IO and Serial". The main content area is titled "Port 1 Settings (RS422/485)".

Serial Port 1

Port Status : Idle
Port Type : RS422/485

Default Port Settings

Always use these settings (Ignore settings from application)

Baud Rate : (60-1000000) Other.. 375000 bps
Data Bits : 8 Parity : Space
Stop Bits : 1 Flow Control : None
 Enable FIFO
Duplex Mode : RS422 full-duplex mode

Protocol Settings

Protocol Type : Raw TCP
Local TCP Port : 9001
(1-65535)
Connection Timeout : 0 seconds
(0-65535)

Note: Connection timeout will not be used if set to '0'.

Serial Tunneling

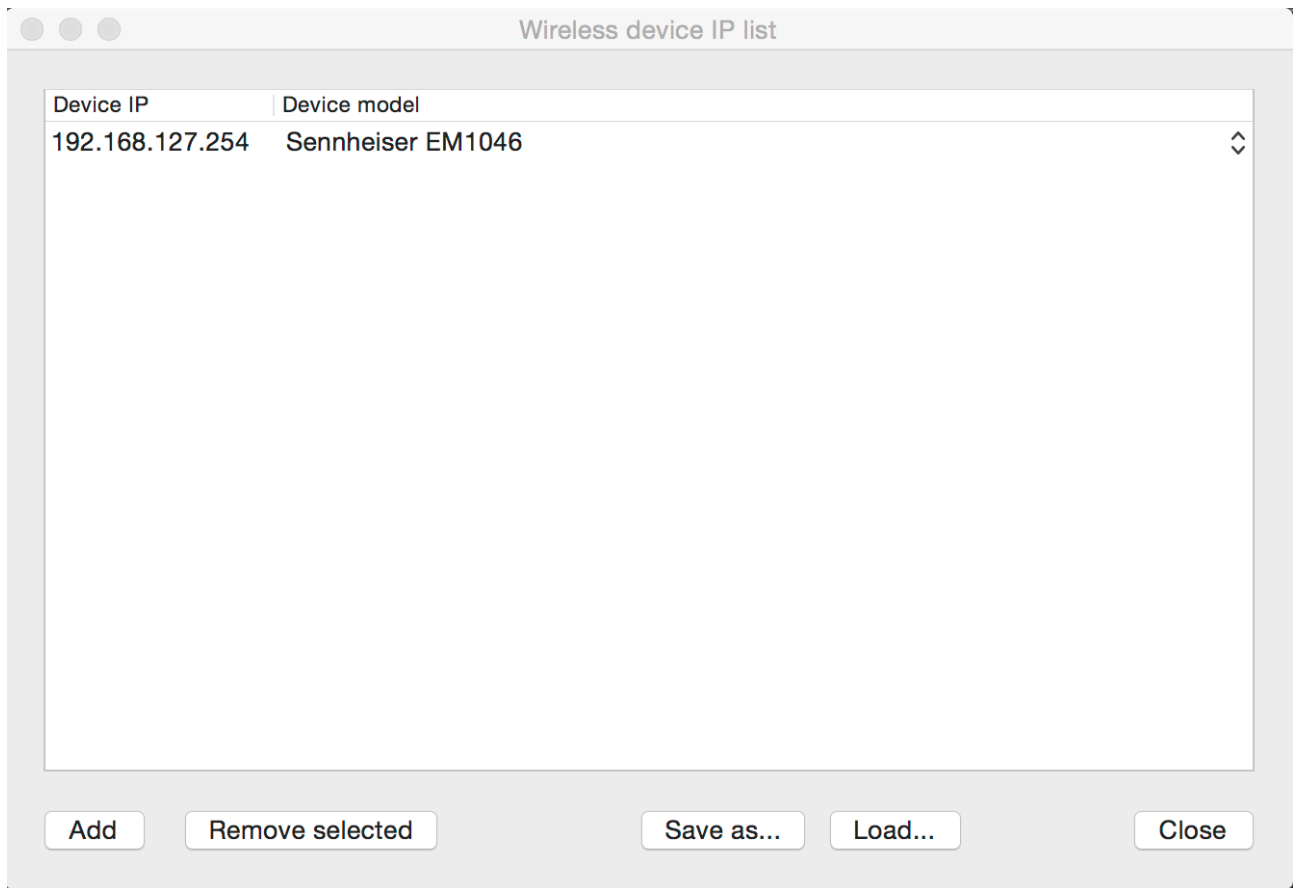
Enable :
Remote IP Address : 192 . 168 . 0 . 0
Remote TCP Port : 9001
(0-65535)

Note: Serial Tunneling only needs to be configured from one side.

Apply Changes Reset

2.

Verify that you are running the latest version of Wavetool. In Wavetool Wireless IP List Menu window you need to add Brainboxes ES-320 IP address to be EM-1046 device IP address. By default, ES-320 IP address is 192.168.127.254



3.

Make sure that your serial cable from ES-320 to the first EM-1046 receiver is connected. The correct pin out for the cable is:

EM1046 Interface				
Termination	Device	EM1046-LI	Serial Card	NOTE: Both TX+ and TX-, and RX+ and RX- should run on pairs; GND should also run on the shield
	Connector	DB-9F	DB-9F	
Line	TX+	1	7	
	TX-	6	6	
	GND	2	5	
	RX-	3	1	
	RX+	8	2	



4.

Make sure that your serial link cables between the EM-1046 receivers are connected. Use your standard 1:1 link thru cables supplied with your previous EM-1046 setup.

5.

Make sure that all the receivers have independent ID's between 1-8 and the remote switch in EM-1046 front panel is on.

For more information, please contact support@wavetool.fi

