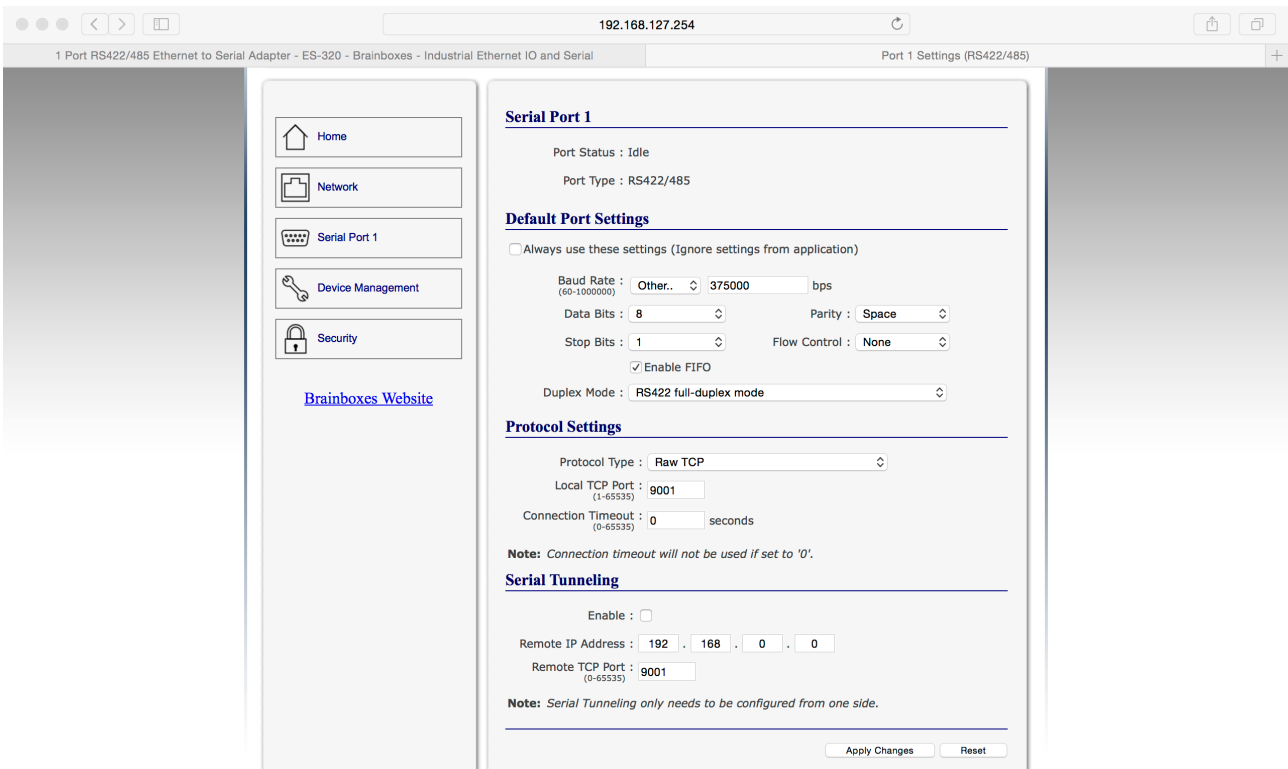


Wavetool V2 instructions for connecting to Sennheiser EM-1046 by using Brainboxes ES-320 Ethernet to Serial adapter

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

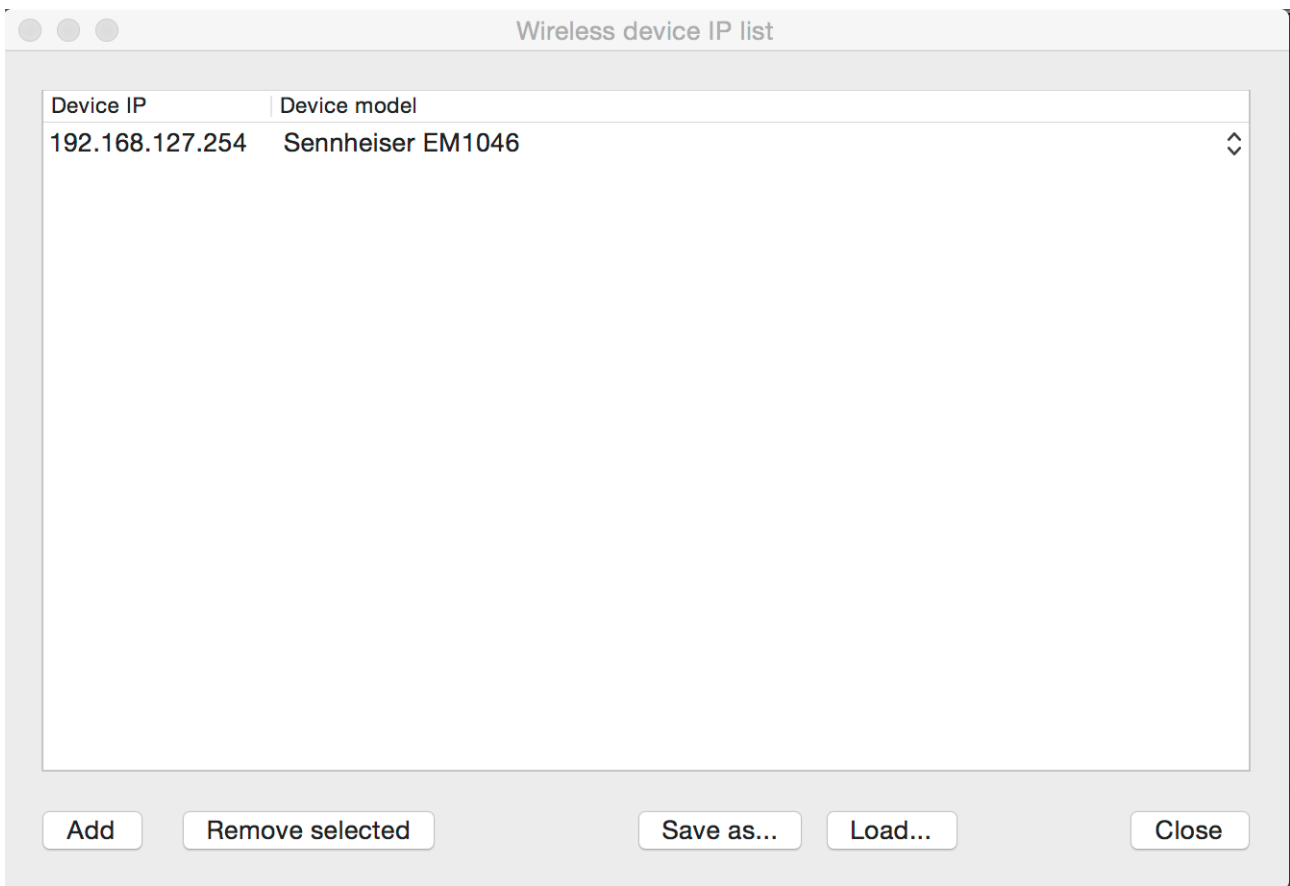
Enable :
Remote IP Address : 192 . 168 . 0 . 0
Remote TCP Port : 9001
(0-65535)

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

Apply Changes Reset

2.

Verify that you are running Wavetool V2 with EM-1046 support. 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

