



MarineTraffic

ELGR 162/ETH AIS RECEIVER

SETUP GUIDE

This MarineTraffic-provided AIS Receiving unit is a two-channel AIS Receiver (162.025/161.975 MHz) equipped with both Ethernet and Serial Outputs.

The network interface of the receiver (Ethernet) is a WIZnet Serial-to-Ethernet module (WIZ107SR). A configuration tool for the WIZnet module can be found here:

<http://www.marinetraffic.com/files/>

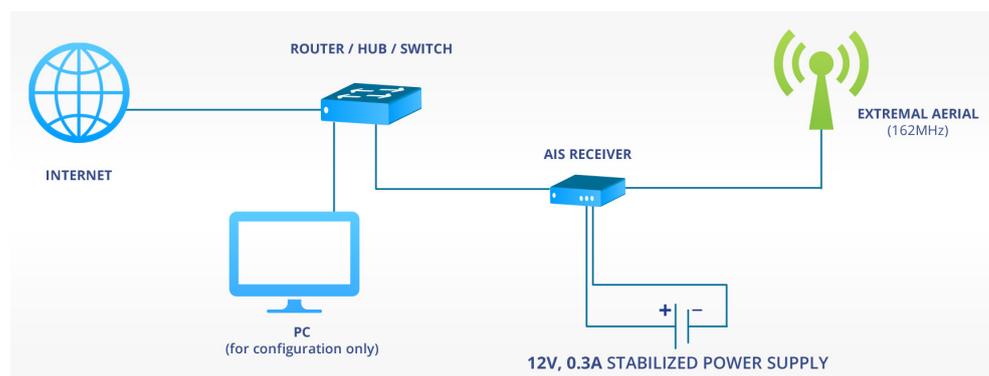
[WIZ107_108SR_ConfigTool_installer_and_source_v1_4_1.zip](#)

INSTALLATION

The AIS receiver must be connected to:

1. An external aerial antenna suitable for receiving frequencies within the marine VHF band (156Mhz to 162.025Mhz).
For better reception use a high-gain antenna especially designed for AIS frequencies. The cable of the aerial must be kept at the minimum possible length and connected to the receiver with a BNC connector.
2. Your local area network.
Any available Ethernet port (RJ-45) on your router or switch or hub is suitable for use. Use a Cat-5 or Cat-6 Ethernet cable with RJ-45 connectors at both ends (not provided).
3. A power supply.
Depending on the model of the receiver, it can be connected either directly to the main AC power or to an external DC power supply of 12 to 25V, 0.3A. Any stabilized 12V power adaptor is suitable for use. The adaptor is not included in the package. Pay attention to the correct polarity of the cable (+ red, - black).

Refer to the following connection diagram. Please note that the PC is only needed for configuring the receiver and it is not necessary for normal operation of the receiver.



DEFAULT SETTINGS

In case your network supports the DHCP protocol (Automatic IP address assignment) which is the usual case, the receiver will be plug-and-play. The receiver is initially configured to be automatically assigned with an IP address and to send the collected data directly to the **MarineTraffic** servers.

CHANGING CONFIGURATION

In case it is necessary to change the network configuration of the receiver, please take the following steps:

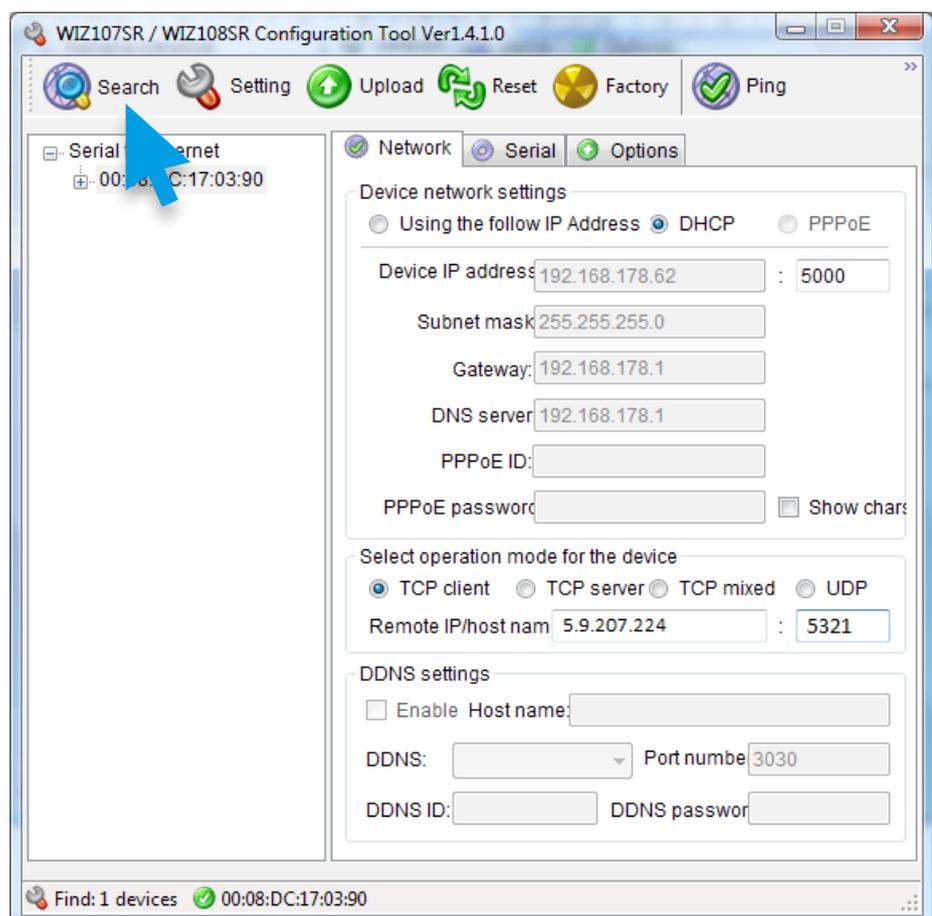
1. Connect the AIS receiver and a PC in the same Local Area Network. In some cases, it will be necessary to directly connect the receiver and the PC using a single Crossover Ethernet cable between them.

Download the Configuration Tool:

http://www.marinetraffic.com/files/WIZ107_108SR_ConfigTool_v1_4_1.zip

and run the **Setup.msi** file to install it. Open the program (**Start » All Programs » WIZnet » WIZ107_108SR » Config Tool**).

2. Click on the **Search** button. The device will be discovered and its MAC address will appear at the **Serial to Ethernet** list as shown on the screenshot below:





IMPORTANT

If you haven't done this already, please visit the MarineTraffic website (<http://www.marinetraffic.com>) and register yourself by creating a New Account.

Upon registration, sign-in to your account (top right corner) and click on My Account > My Stations > Add Receiving Station to add your Station to the MarineTraffic Network.

This way, you will get a new Station ID and a unique Port Number to send your data to.

NETWORK TAB

1. Device network settings:

Select **Using the follow IP Address** to assign a static IP address or **DHCP** to use the automatic IP assignment if your network supports it. In case **Using the follow IP Address** option is selected, make sure that you have correctly filled the **Device IP address**, **Subnet mask** and **Gateway** values. All values are required and they must match the settings of your local network.

2. Operation Mode for the device:

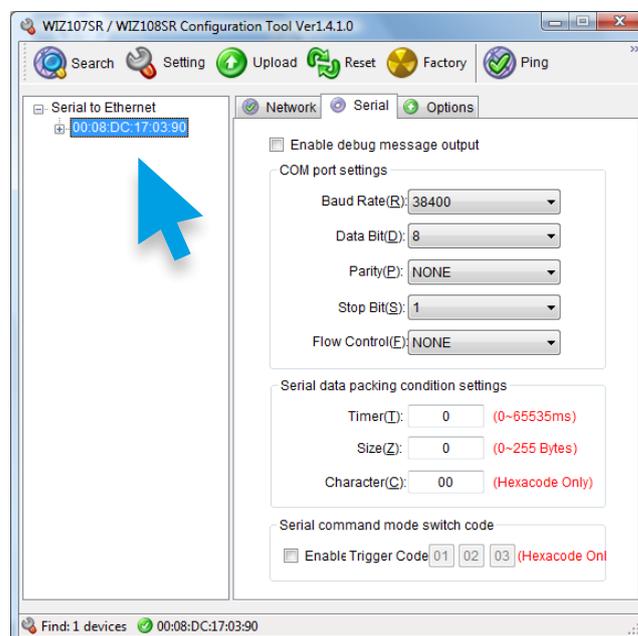
Normally, this is **TCP Client**. This means that the receiver **Pushes** the collected data using the TCP/IP protocol. You may check the **UDP** in case you are experiencing problems or interruptions.

3. Remote IP/Host name:

This is the IP address and port number of the **MarineTraffic's server**, ready to accept incoming data. Use the IP address **5.9.207.224**. Port number is preconfigured or it is given to you when you are registering your station as mentioned above. You may use the default port **5321** for testing purposes.

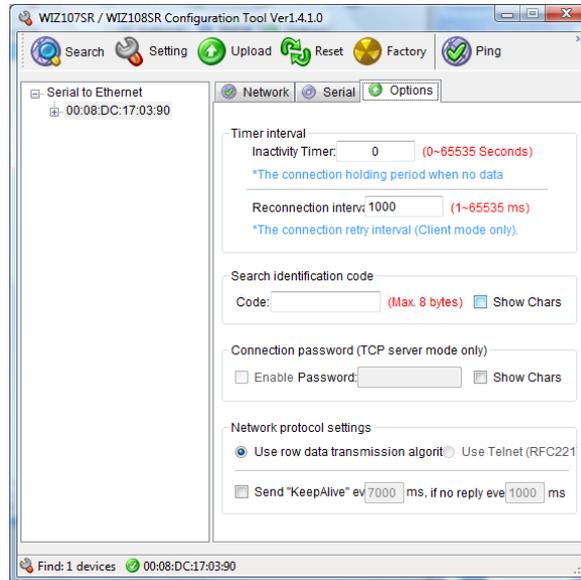
SERIAL TAB

The values are preconfigured as shown below and, normally, you will not have to alter them:



OPTIONS TAB

The values are preconfigured as shown below:



SAVING CHANGES

Click the **Setting** button on the top menu to save the changes and reboot the device.

Finally, visit your station's Details page and make sure your station status is **ONLINE**.
(it may take a few minutes for that to happen):

Current Status & Statistics	
Status	ONLINE 
Availability	100% (2159 hours online / 2161 total hours)
Reception distance in nautical miles	Average: 9.2 / Max: 32.9
Records received in 1 hour	Distinct Vessels: 219 / Positions: 1962
Area Covered	3321 km ²

That's it!

You are now sharing your data with us.

We sincerely appreciate your contribution to our site and your help to expand our services and coverage.

