# QK-A021 AIS Receiver Dongle(Auto-hopping V1.0)

Features

- Receiving on dual channels(161.975 MHz and 162.025 MHz) alternatively
- Auto-hop channels algorithm improves 4% of captured message rate
- Sensitivity down to -106 dBm@30%PER
- Up to 55 nautical miles receiving range
- USB 2.0 powered(<26mA@5.0V)
- 38400bps baud serial over USB
- Message output in industry NMEA-0183 format
- Support working together with NMEA-0183 GPS receiver
- SMA connector for 50 Ohm VHF antenna
- SMA to BNC coaxial adaptor included
- Compatible with Windows and MAC system
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1   QUICK START

1.1. Connect the module with a proper VHF antenna. BNC or N type adaptor can be used to connected with different external VHF antennas.

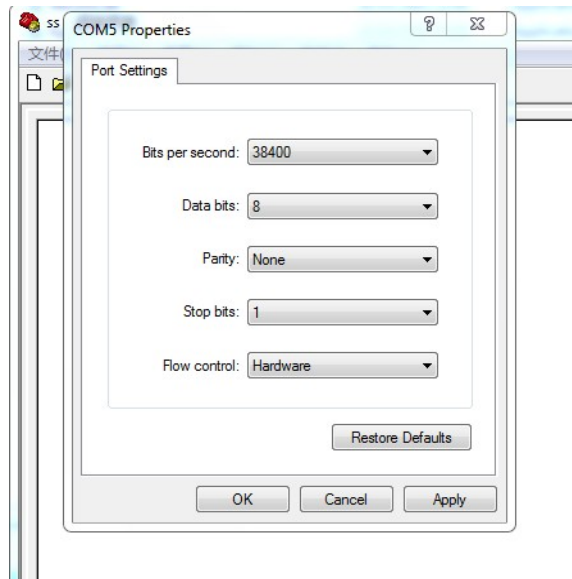SMA cable

BNC connector with cable

N type connector with cable
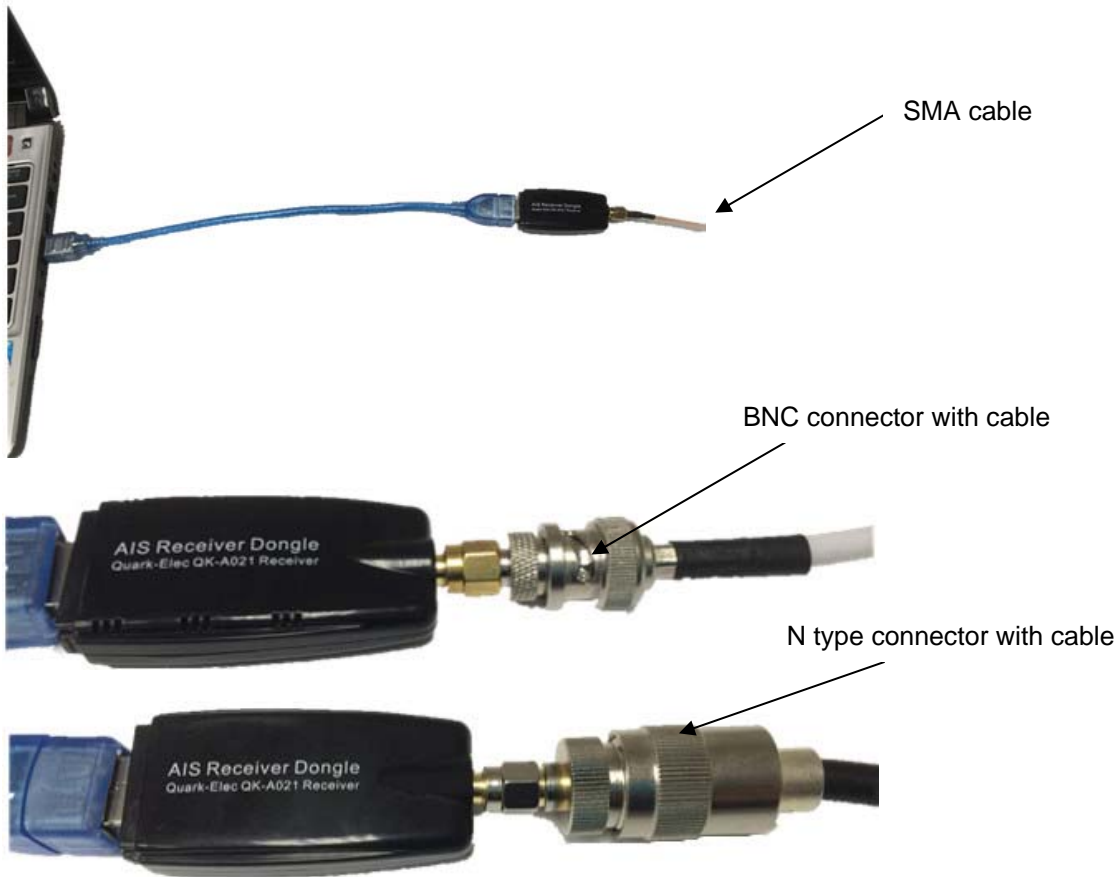
1.2. Download the Virtual COM Port Driver (VCP) driver for QK-A021. This driver can be get on the CD in the packing box or download from Quark-elec website through: http://www.quark-elec.com/drivers

1.3. Connect QK-A021 to the computer, follow the instruction on the computer and take the folder where the driver was saved. After the driver installed, run the Hardware Manager and check the COM interface number.

QK-A021 is in COM5
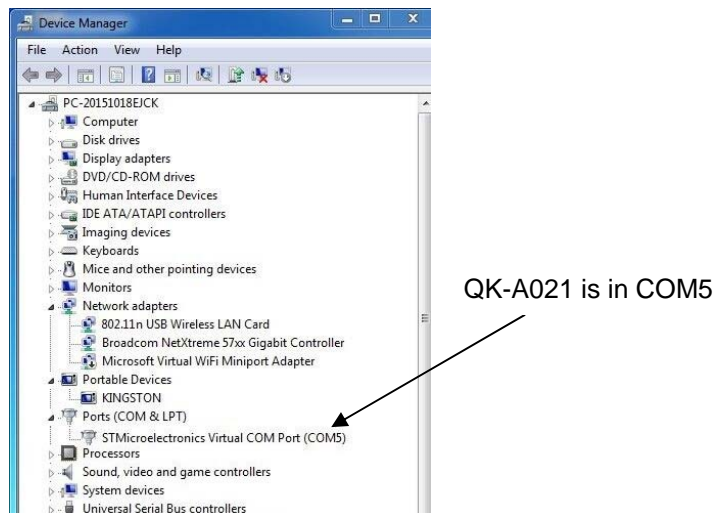
1.4. Run a terminal monitor application like, Putty, HyperTerminal, or any other similar tools to check the connection. Make sure to set the COM port as 38400bps, 8,N and 1).

If all above set correctly, customer should see similar as the following information:

1.5. Run any AIS NMEA-183 compatible chart software, like OpenCPN or SeaClear, and then start to view the AIS information on it.

2   USING QK-A021 WITH OPENCPN

OpenCPN is a free software for view a concise chart plotter and navigation. It is available for use on PC's and MAC OSX system. The following is a example setting for OpenCPN plotter. COM2 was set as QK-A021 input and COM1 is for a standard serial port GPS input.

AIS input is in COM2

GPS input is in COM1
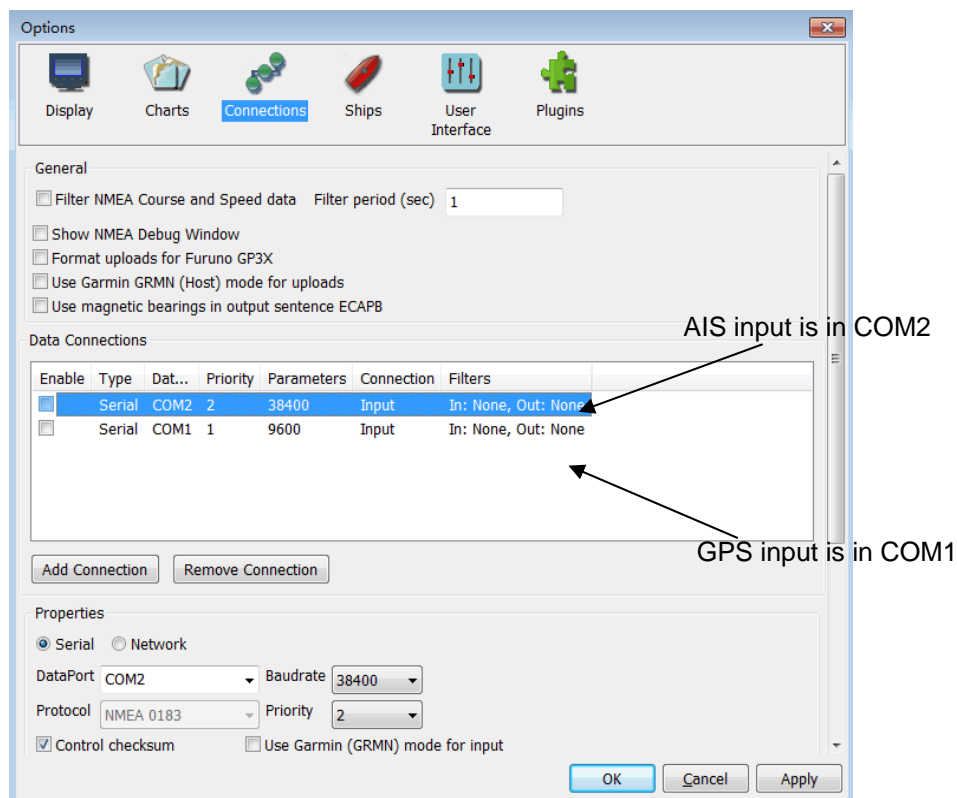
For more technical information and enquires please go to Quark-elec forum:

http://quark-elec.com/forum/

For sales and purchasing information, please email us: info@quark-elec.com

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