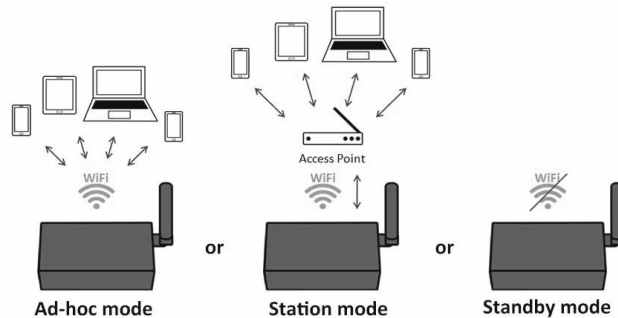### 9. Standard WiFi Ad-hoc connection on your wireless device:

15 seconds after the A026+ has powered up, scan for a WiFi network with an SSID similar to 'QK-A026xxxx'.
Connect to '**QK-A026xxxx**' with the default password: '**88888888**'.

Chart software: in your chart software, set the protocol to '**TCP**', IP address to '**192.168.1.100**' and port number to '**2000**'

Ad-hoc mode   Station mode   Standby mode

For Station mode WiFi or to disable WiFi, use the Configuration software. (see below)

USING THE CONFIGURATION SOFTWARE (WINDOWS):

Ad-hoc WiFi password can be changed for security and memorability.

WiFi can be changed from Ad-hoc (default) to Station mode or Standby.
Station mode is configured by inputting your router/access point's details into the Configuration software. Once configured, the correct settings must be entered into your chart software.

Filtering: using the black list function
If desired, selected NMEA sentences can be blocked from chosen input/s, using the 'black list ' field. Remove the '$' or '!' from the 5 digit NMEA talker and sentence identifier and insert separated by commas. For example to block '!AIVDM' and '$GPAAM' enter 'AIVDM,GPAAM' .
Up to 8 sentences types can be filtered from each input port. If blacklisting SeaTalk[1] data, block the corresponding NMEA message (see the manual for a full list of converted messages).

Routing your data
As a default, all input data (excluding any filtered data) is routed to all outputs . Data can be routed to limit the data flow to certain output/s by un-ticking the corresponding boxes in the Configuration software.

Monitor the data stream via USB
Use the 'Display' tab on the Configuration tool to monitor all input data including the data received through NMEA 2000 backbone. (both PCDIN and NMEA 0183 format).

**NMEA Default Baud rates** can be adjusted as required. Default Baud rates settings are:
- NMEA IN 4800bps, NMEA OUT: 38400bps. These can be adjusted as required.
  Setup the output format of the NMEA 2000 messages. NMEA 2000 data can be output to WiFi and USB port in two formats: PCDIN (raw N2K data) or the converted NMEA 0183 format.

QUARK-ELEC

SET-UP GUIDE

QK-A026+ NMEA 2000 AIS RECEIVER

WITH SEATALK CONVERTER
NMEA 0183/N2K/WIFI/USB/ OUTPUT
MULTIPLEXING ADDITIONAL NMEA 0183 INPUT
BUILT-IN NMEA 0183 TO NMEA 2000 CONVERTER
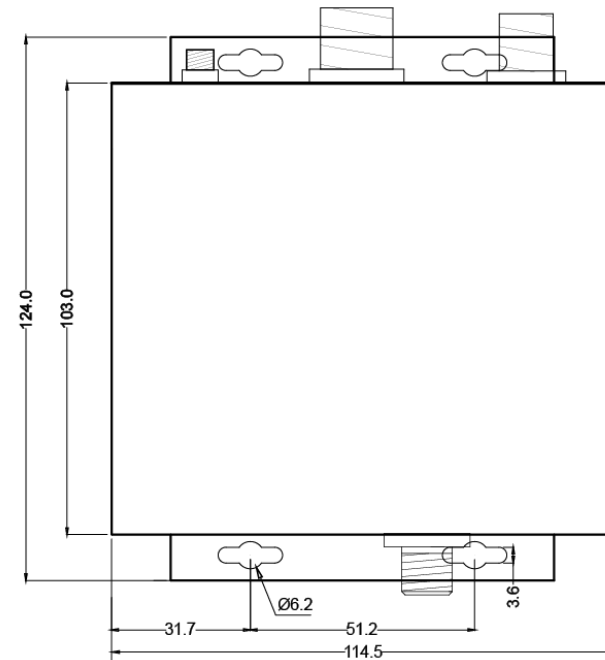
All products are CE, RoHS certified
www.quark-elec.com

Please recycle your packaging

⚠️ **This is an overview only. Familiarize yourself with the manual and the manuals of any connecting devices before installation. It is always recommended that electronic equipment be installed by an experienced installer.**

BEFORE LEAVING HOME:

12V power required, the A026+ isn't powered by the NMEA 2000 backbone.

Configuration software is optional and only needed for specific features.

To use any of the following features, you will require the Configuration Software:

- Changing WiFi mode from Ad-hoc to Station mode or Standby
- Adjusting baud rates from their default settings (NMEA 0183 input as 4.8kbps, output as 38.4kbps)
- Filtering unwanted or excess data
- Routing data away for certain output devices
- Full diagnostics monitoring of the data streams

Configuration software (Windows) will be required to adjust these settings. (see back of this guide for more information). Driver may be required for older Windows PCs. This may install automatically to Windows 10 systems (if not, it is on the free CD and at quark-elec.com)
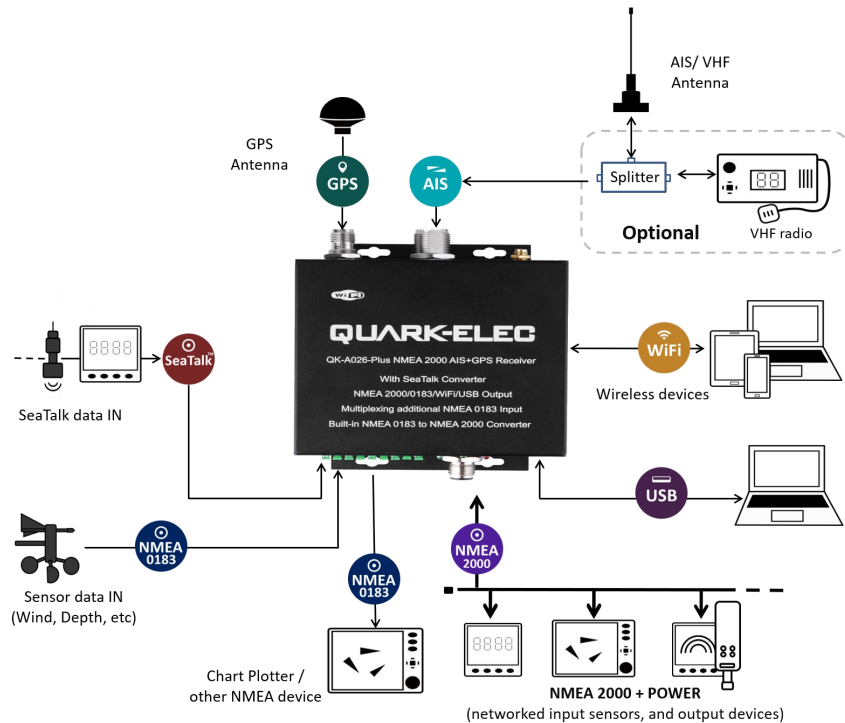
INSTALLATION

1. **Mounting: Consider your location…**
- Dry, sturdy location 0.5 meter from other WiFi/VHF equipment.
- Ensure you have the correct length of cables needed. If drilling holes for your cabling, seal
2. **Disconnect power from NMEA 2000 Backbone and disconnect power from all NMEA and SeaTalk[1] devices to be connected.**
3. **Connect your Antennas: VHF and GPS**
- **Connect VHF:** If you want to use one VHF antenna for both A026+ and VHF radio (for any another application), then you will need an active splitter. An active splitter will protect the A026+ and other VHF equipment (such as a VHF radio). If not, the two signals will significantly damage each device connected as well as reducing the signal.
  If using two VHF antennas, place them as far away as possible from each other (min 3 metres).
- **Connect GPS if desired:** The GPS antenna should be located outside where the sky is visible for best results.
4. **Connect any input/output devices.**
- **NMEA 0183 input/output:** Connect the '+' and '-' terminals of the NMEA input/output on the A026+ to the '+' and '-' terminals of the output/input on the instrument.
  The A26+ uses NMEA 0183-RS422. If your connecting device uses the older NMEA 0183-RS232 and you are having issues with your NMEA connection, you may find swapping these terminals works for your device. Alternatively, connect it using a Protocol Bridge (QK-AS03).
- **SeaTalk[1] input:** Take care to connect the '+', 'Data' and '-' correctly. Swapping and incorrect application of any of these wires can cause underline permanent damage the A026+.
5. **Connect the A026+ to your un-powered NMEA 2000 backbone.**
6. **Connect the un-powered 12V cable to the A026+, then power up.**
7. **Re-Connect power to your connected devices and NMEA 2000 backbone.**
8. **Check LED lights are working as expected.**
- **SeaTalk[1]** and **NMEA IN LEDs** will flash for each valid message received on the respective
- **GPS**: LED flashes every second while receiving a valid message.
- **AIS**: LED flashes for each valid AIS message received.
- **N2K**: LED flashes for each valid NMEA 2000 PGN sent out on 2000 port.
- **OUT:** LED flashes for each valid message send out on the NMEA 0183 output.
- **WiFi:** LED flashes for each valid NMEA message sent to WiFi output.
- **PWR (Power)**: LED light is constantly lit in red when the device is powered.