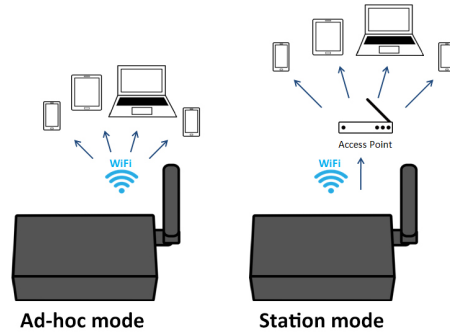


6. Connect via WiFi if desired

Ad-hoc mode WiFi (direct A032 to phone/tablet/PC) is the default setting, this requires no Windows configuration.

- **On your device (phone/tablet/PC):** 15 seconds after the A032 has powered up, you can scan for a WiFi network with an SSID similar to 'QK-A032xxxx'. Connect the device to 'QK-A032xxxx' with the default password: '88888888'.
- **In your chart software:** set the protocol as 'TCP', IP address as '192.168.1.100' and the port number as '2000' in the chart software.



Station mode WiFi (A032 through a router/access point - to phone/tablet/PC) allows you to access your data at the same time as your other WiFi network data. This option requires configuration to set up the connection between the A032 and your router. See the 'Configuration' section of the manual and configuration instructions on the CD provided.

7. Need to configure baud rates, USB or WiFi settings?

The device is set to connect wirelessly in Ad-hoc mode (with no need for a router or access point) If you want to change to Station mode (connecting through a router) or adjust other setting, see the configuration section of the manual and the configuration instructions on the CD provided.

UPGRADING FIRMWARE

From time to time, Quark-elec provides new firmware updates to support additional NMEA 2000 PGNs and NMEA 0183 messages. Users can update the firmware on their devices to the latest available version.

The upgrading process can be found from the manual online. However please be aware of the following information at the first time when you start to use A032. Un-proper action could permanently damage the device.

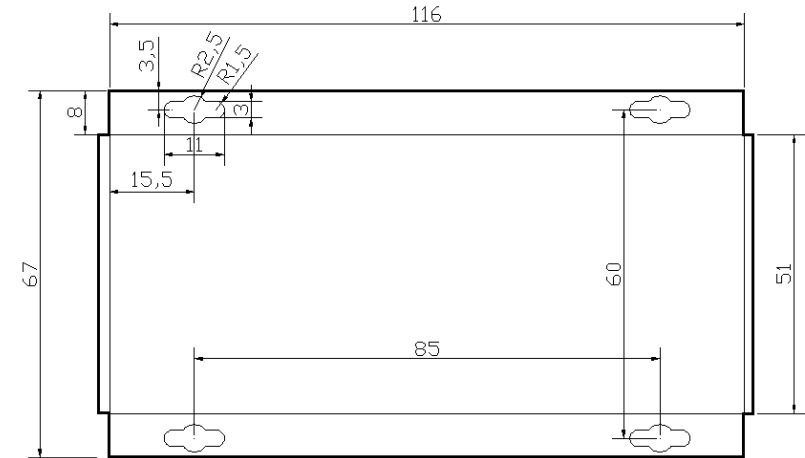


Before starting the firmware update, please ensure all your other devices are disconnected from your NMEA 2000 backbone. During this process, only the QK-A032 should be connected to the backbone, as data sent to the network by other devices might cause damage to the A032 during the update.

QK-A032

NMEA 2000<—> 0183

BI-DIRECTIONAL GATEWAY



- **What You Need**
- **Installation Overview**
- **Notes**

All products are CE, RoHS certified
www.quark-elec.com

Disclaimer: This product is designed to aid navigation and should be used to augment normal navigational procedures and practices. It is the user's responsibility to use this product prudently. Neither Quark-elec, nor their distributors or dealers accept responsibility or liability either to the product user or their estate for any accident, loss, injury or damage whatsoever arising out of the use or of liability to use this product.

Email: info@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. Designed to be connected by an experienced installer.

BEFORE LEAVING HOME:

12.0V power from N2K bus required

We recommend pre-installing the Configuration software and drivers if needed, as you might not have a CD reader/internet access on site.

Driver and configuration software are optional and only needed for specific features.

If you will access data on a Mac/Linux/Windows PC:

- Driver required for Windows. If using Windows 10, the driver should install automatically, if not, it is included on the Free CD and at Quark-elec.com. Driver not required for Mac or Linux

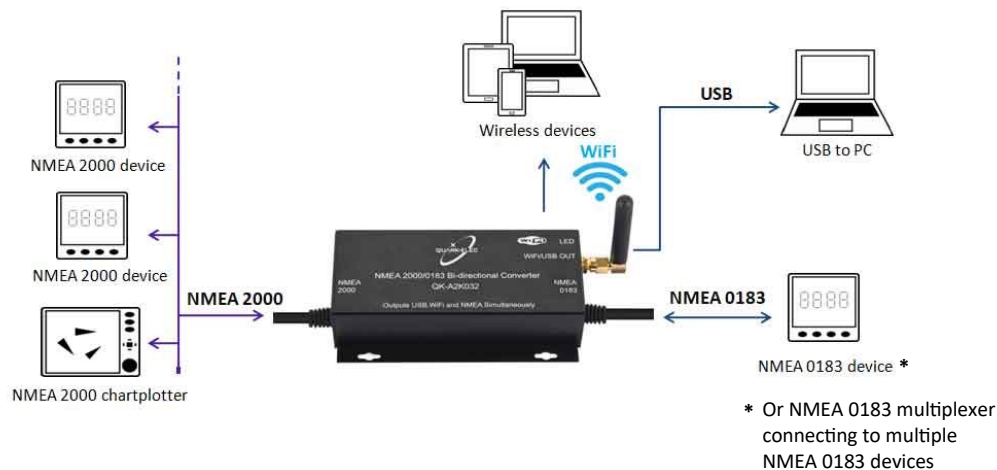
If you will connect to the A032 through Station mode WiFi: (e.g. through a router, see page 4)

- Configuration software (Windows) required. Driver may be required as above.

If you will adjust NMEA 0183 baud rates: The NMEA 0183 baud rates are set to 4800bps for the input and to 38400 bps for the output. These are simply the default settings, users can adjust the baud rates using the configuration software.

- Configuration software (Windows) required. Driver may be required as above.

Configuration software and specific instructions are on the FREE CD and at www.quark-elec.com.



INSTALLATION

1. Mounting: Consider your locations

- Dry, sturdy location 0.5m from other WiFi equipment.
- Ensure you have the correct length of wires needed. If drilling holes for your cabling, seal around any holes to prevent damage to your vessel or equipment.

2. Disconnect all power sources before connecting your equipment!

3. Connect to your NMEA 2000 backbone (12.0V power)

The QK-A032 draws 12.0V power from your NMEA 2000 backbone. You will need a backbone and 2 termination resistors (1 on each end), such as NMEA 2000 Starter Kit (www.quark-elec.com/product/nmea-2000-n2k-starter-kit/).

4. Connect your NMEA 0183 device following the colour code below

Wire Colour	Wire Name (Function)
Blue	NMEA out-
White	NMEA out+
Black	NMEA in-
Grey	NMEA in+
Brown	GND

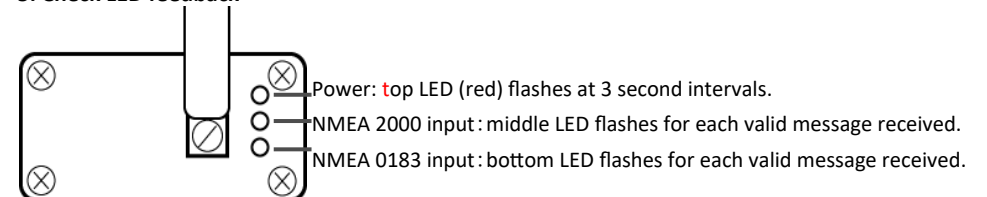
The A032's NMEA 0183 interface is based on the RS-422 protocol, but it also supports NMEA 0183—RS232 devices. Please see the tables below for more information:

QK-A032 terminal	RS422 device
NMEA OUT +	NMEA IN +
NMEA OUT -	NMEA IN -
NMEA IN +	NMEA OUT +
NMEA IN -	NMEA OUT -

QK-A032 terminal	RS232 device
NMEA OUT +	GND
NMEA OUT -	NMEA Input
NMEA IN +	GND
NMEA IN -	NMEA Output

Swap the NMEA + and NMEA - (NMEA In and GND / NMEA Out and GND wires for RS232 devices) data wires if the connection does not work. **Switch off and disconnect devices from their power supply before disconnecting and re-connecting data wires!**

5. Check LED feedback



Please note: the two LEDs can only show when their respective data is received not sent.