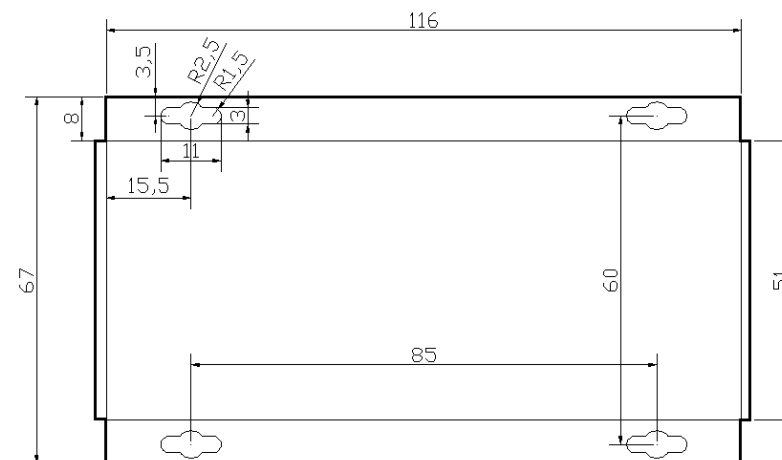


**QK-A028****NMEA 2000 AIS RECEIVER + GPS****NMEA 0183/NMEA 2000/USB OUTPUT**

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

**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.

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V1.0(1/19)

All products are CE, RoHS certified  
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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.

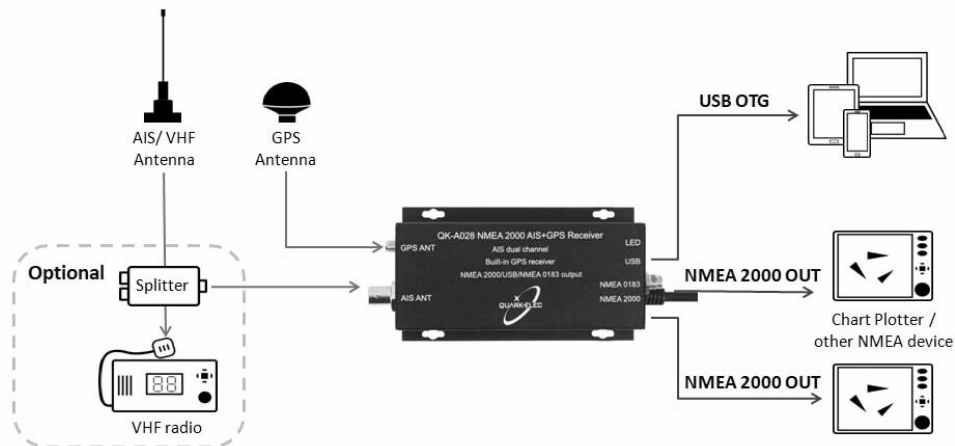
## BEFORE LEAVING HOME:

### 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.

**Drivers software is optional and only needed to access your data via USB.**

- **Windows PC:** A driver is required if using Windows and may install automatically, if not, it is included on the FREE CD and Quark-elec.com.
- **Mac / Linux:** Drivers not required for Mac or Linux.



## INSTALLATION

### 1. Mounting: Consider your location...

- Dry, sturdy location in reach of your N2K backbone.
- Ensure you have the correct length of cables needed for VHF and GPS antennas. 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 your Antennas: VHF and GPS

- **Connect VHF:** If you want to use one VHF antenna for both AIS and radio (or other purposes), then you will need an active splitter. An active splitter will protect the A028 and your other VHF equipment (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 from each other as possible (at least 3 metres).
- **Connect GPS if desired:** For best results, the GPS antenna should be located outside where the sky is visible.

### 4. Connect to NMEA 2000 Backbone

The A028 is powered through the NMEA 2000 backbone.

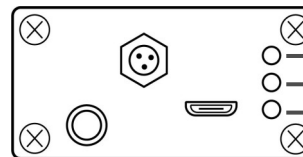
### 5. Connect NMEA 0183 output if desired

Connect the '+' and '-' terminals of the NMEA output on the A028 to the '+' and '-' terminals of the input on the instrument.

The A028 outputs 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 '+' and '-' terminals works for your device. Alternatively, connect it using a Quark-elec Protocol Bridge (QK-AS03).

### 6. Connect power and check LED lights are working on the A028

Flashing green lights indicate a valid signal is coming through the A028 from either GPS or AIS.



- **Power:** Top LED (red) flashes at 3 second intervals.
- **AIS:** Middle LED flashes for each valid message received.
- **GPS:** Bottom LED flashes every second while valid message received.

**7. Connect via USB if required.** Windows PCs may require you to install a driver (on CD and [www.quark-elec.com](http://www.quark-elec.com)). Once the driver is installed simply input the COM port number from your Device Manager into your chart software.

If wishing to connect to a tablet or phone, this device will have to have USB OTG technology. Not all Phones and tablets have 'USB On The Go' functionality.