

## QK-AS03 Garmin Bridge board

QK-AS03 Garmin Bridge enables the connection of Quark-elec AIS receivers to other RS232 standard NMEA 0183 devices, like Garmin plotter devices. QK-AS03 solves the issue of converting the balanced signal output by our AIS receivers into the unbalanced signal required by Garmin plotters.

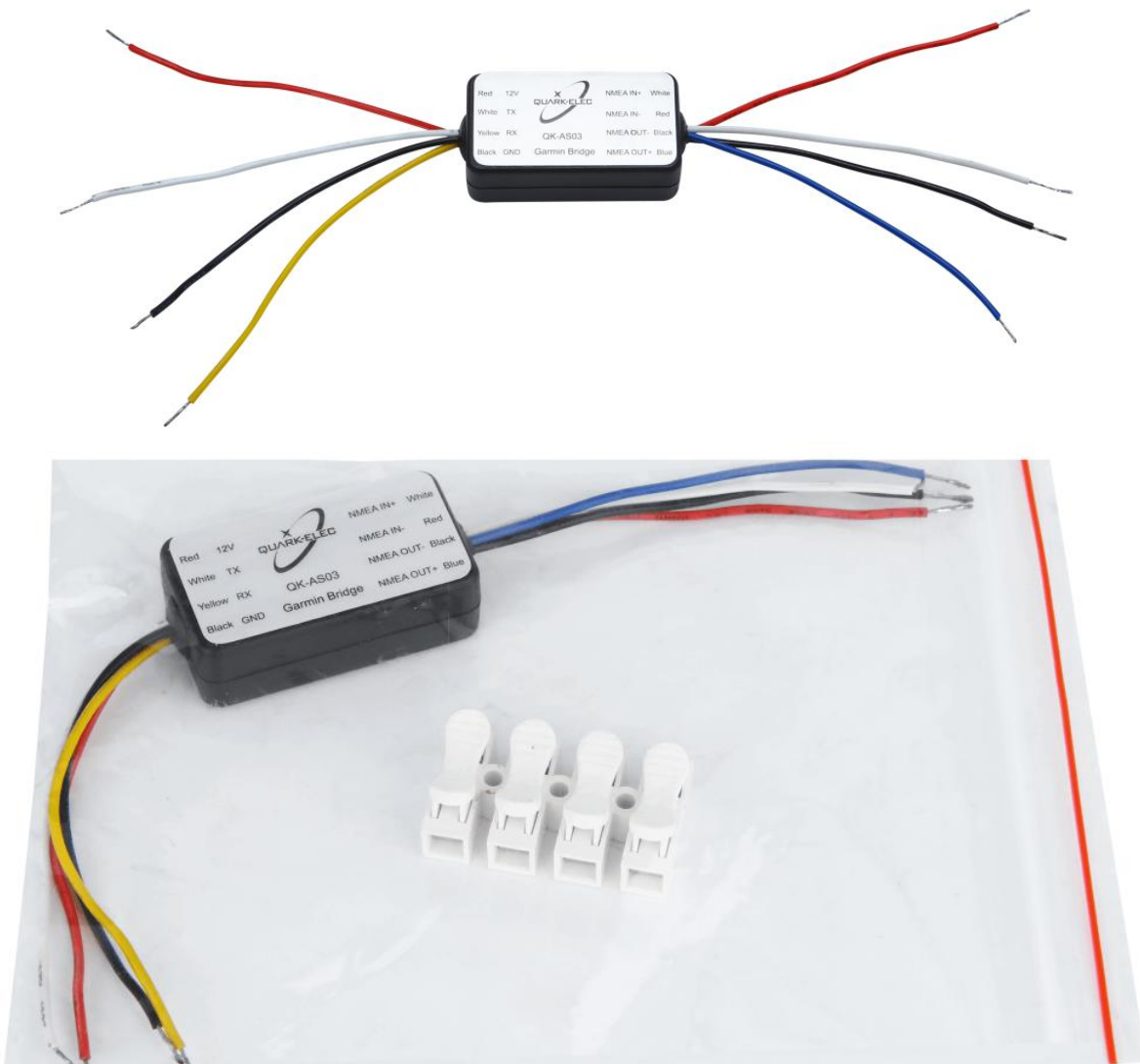
### Features

- Provides compatibility between Garmin input equipment and Quark-elec AIS receivers
- RS232 to RS485 signal conversion
- Simple 'Plug 'n' Play' connection
- No setup/configuration needed



## Quark-Elec Application Note

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## Limited warranty

Quark-elec warrants this product to be free from defects in materials and manufacture for one year from the date of purchase. Quark-elec will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts and labour. The customer is, however, responsible for any transportation costs incurred in returning the unit to Quark-elec. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration or repairs. A returns number must be given before any unit is sent back for repair.

The above does not affect the statutory rights of the consumer.

## Disclaimer

## Quark-Elec Application Note

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.

## Order Information

Part No	Description
QK-AS03	QK-AS03 Garmin Bridge board

### 1 CONNECTIONS

QK-AS03 enables NMEA outputs from Quark-elec AIS receivers to be directly interfaced with Garmin Plotters.

Connect the +/- terminals of the NMEA input/output on the QK-AS03 to the +/- terminals of the input/output on the Garmin Bridge.

The same way for Connect the 12V/Tx/Rx/GND wires on the Garmin Bridge to the corresponding terminals on the Garmin Plotter.

12V external battery can be used to power Garmin plotter and Garmin bridge together. The following is a typical connection.

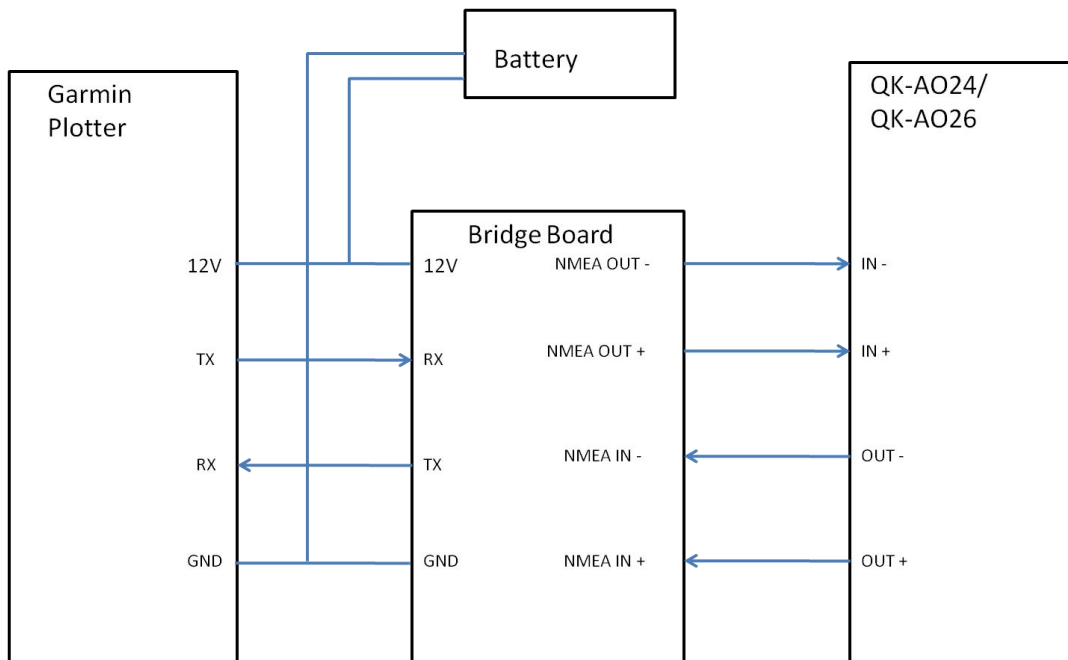


Figure 1 System connection

## Quark-Elec Application Note

### 2 MOUNTING

QK-AS03 uses an IP56 Insulation Class 2 plastic enclosure with 50x25x15 mm external dimensions. It should be installed between the AIS Receiver and the Garmin Plotter. No fixings are required.

### 3 What is in your package

1. Four way connector strip
2. QK-AS03



### 6 SPECIFICATION

Item	Specification
DC supply	12V(+/-10%)
Average supply current (typical quiescent)	8mA
NMEA data format	ITU/ NMEA 0183 format
NMEA input data rate	4.8k to 38.4kbps
NMEA output data rate	4.8k to 38.4kbps
Operating temperature	-25°C to +80°C
Storage temperature	-25°C to +85°C

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For more technical information and other enquiries, please go to the Quark-elec forum at:

<https://quark-elec.com/forum/>

For sales and purchasing information, please email us: [info@quark-elec.com](mailto:info@quark-elec.com)



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