

CONFIGURATION TOOL INFORMATION

The A052T transponder must be properly configured with your vessel's details before its first use. Accurate entry of this information is essential, as it will be broadcast to other AIS-equipped vessels and shore stations.

The A052T transponder can be configured using one of two methods:

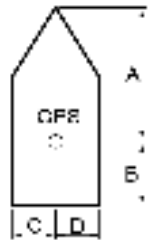
1. USB configuration (Windows PC only): Connect the A052T to a Windows PC using the supplied USB cable. Download the configuration tool from : <https://www.quark-elec.com/downloads/configuration-tools/>

Once setup is complete, unplug the USB and power cycle the A052T to apply the new settings.

2. WiFi Web Interface: The A052T includes a built-in web interface for quick and easy configuration of transmission power and vessel details via WiFi. This can be accessed via any standard web browser on Windows PCs, Macs, MacBooks or Android devices. This option is especially convenient for non-Windows users.

For detailed instructions on using either method, please refer to the A052T User Manual.

Some configuration fields—such as MMSI and Ship Type—are legally required for operation on water. Verify requirements with your local authority or coastguard.

Config	Notes
MMSI*	Maritime Mobile Service Identity is your unique 9 digit number that is assigned to a DSC (Digital Selective Calling) DSC radio or a transponder unit. See chapter in manual on mobile maritime service identity .
Ship type*	This field should contain a number referring to the type of vessel you are using this transponder on. For example '36' for vessels using sail propulsion. And '37' for pleasure craft (Yacht powered by engine).
GPS A B C D	<p>A: Distance from bow to GPS antenna in metres B: Distance from stern to GPS antenna in metres C: Distance from port to GPS antenna in metres D: Distance from Starboard to GPS antenna in metre</p> <p>(The transponder must know where your GPS antenna is located to make accurate readings. Be as accurate as possible when writing this information as it will impact on the accuracy of your GPS data.)</p> 
CALL SIGN	Your vessel's call sign if relevant.
Name	Name of your vessel.
WiFi	See notes on previous page and WiFi section of the manual.



When using the A052T alongside a VHF radio with a shared VHF antenna, a splitter, like Quark-elec A015-TX, must be used. Failure to use a proper splitter may result in damage to either the A052T or the VHF radio.

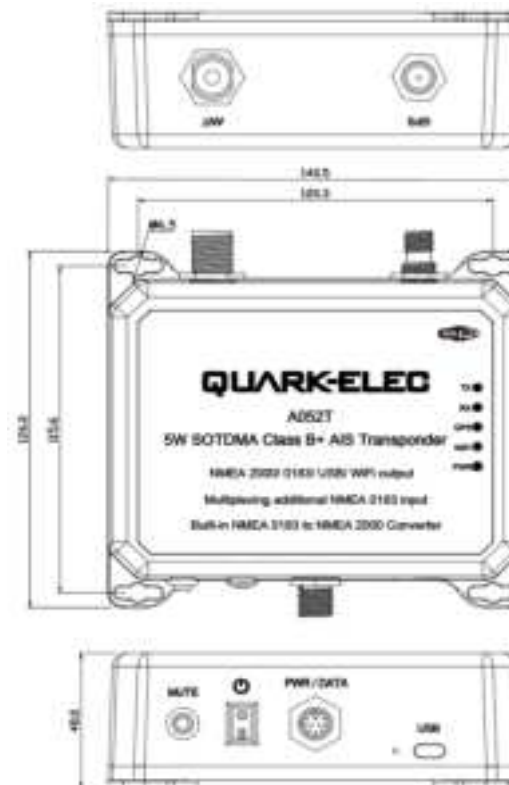
Disclaimer

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(UK), 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.

QUARK-ELEC

SET-UP GUIDE

A052T AIS TRANSPONDER 5W SOTDMA CLASS B+ WITH USB, WIFI AND NMEA 2000/0183 OUTPUT BUILT-IN NMEA 0183 TO N2K CONVERTER



- What You Need
- Installation Overview
- Notes



Scan here for this Device's User Manual.

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



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 YOU START:



It is highly recommended that all the installation instructions are read before commencing the installation.



There are important warnings and notes throughout the manual that should be considered before installation is attempted. Incorrect installation may invalidate the warranty. The latest manual can be found from the website.

The A052T has been meticulously engineered for use in light commercial, leisure, and fishing vessels, as well as for vessel monitoring applications. While the A052T features a conformal coating on its circuit board and is housed in a plastic waterproof enclosure, it is strongly recommended that the unit be securely mounted in a dry location, away from direct water exposure and environments where salt or dust may accumulate.

INSTALLATION

1. Mounting: Consider your location...

- Dry, sturdy location.
- Ensure you have the correct length of cables. Seal around any drill holes to prevent damage to your equipment.

2. Connect your VHF Antenna

- If you intend to use a single VHF antenna for both AIS and other VHF devices (e.g., VHF radio), you must use an active splitter. An active splitter ensures proper signal distribution and protects both the A052T and your other VHF equipment. Without it, signal interference can occur, potentially causing significant damage to connected devices and severely degrading signal quality.
- If using two VHF antennas, install them with sufficient space between them (min. 3 metres).

3. Connect your GPS antenna

- Connect the GPS antenna to the TNC female bulkhead connector. For optimal performance and reliable satellite reception, install the GPS antenna in an outdoor location with a clear view of the sky. Without a GPS antenna connected, position data will not be transmitted.

4. Connect Power

The A052T operates on a 12V power supply, connected via the POWER/NMEA cable.



Important: Do not reverse the power connections — the red wire is Power+ (12V) and the grey wire is Power– (GND). Reversing these wires may cause permanent damage to the transponder. Please check all connections carefully before powering on.



5. Once connected check the LED lights.

- The red Power LED should remain steadily lit.
- The GPS LED should flash while the device is acquiring a GPS fix and remain steadily lit once a fix has been obtained.
- The Tx and Rx LEDs should flash once for each AIS message transmitted or received, respectively.
- The WiFi LED should flash once every second while data is being transmitted over WiFi to a connected PC or mobile device (e.g., smartphone or tablet).

6. Disconnect power and connect the NMEA 0183 input and/or output to another device as required. Please check the wire colour coding below:

Pin name	Colour
Power+	Red
GND / Power-	Grey
NMEA 0183 IN+	Green
NMEA 0183 IN-	Yellow
NMEA 0183 OUT+	White
NMEA 0183 OUT-	Blue
RS485 GND	Brown

7. Connect the A052T to the NMEA 2000 network. By connecting the transponder to the N2K network, this can share position, AIS and NMEA 0183 IN data with other devices on the network.

8. Re-connect 12V power once all connections are correct. Check LEDs are still working.

9. Connect your A052T to a Windows system for Configuration, using the provided USB cable.

Install the Configuration software (and drivers if needed), now you are ready to enter your configuration information (see next page).

10. WiFi output: to connect wirelessly you have three options:

Ad-hoc WiFi: By default, the transponder's WiFi adapter is set to Ad-hoc mode (with no need for a router or access point or any configuration).

- **On your device (phone, laptop etc.):** After 15 seconds of powering on the A052T, a WiFi network with an SSID similar to 'QK-A052xxxx' should appear. Connect to this network with the default password: '88888888'.
- **Chart software:** set the protocol as 'TCP', IP address as '192.168.4.1' and the port number as '81' in the chart software.

Station mode WiFi settings

To switch to Station mode (i.e., connect via a router) or to adjust other settings, use the Configuration software. For detailed instructions, please refer to the Configuration section of the user manual.