# CONFIGURATION TOOL INFORMATION

The configuration tool for the A042T is where the user will assign their ships information to the transponder. This information is needed for the transponder to accurately broadcast the class B AIS signal. The configuration tool is on the included CD or can be downloaded from https://www.quark-elec.com/downloads/configuration-tools/

The configuration tool operates on a Windows PC.

Name	Description
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**.
IMO	**International Maritime Organization** number should be entered into this section. The IMO number will be on the hull and certificates for the ship.
CALL SIGN	Enter the call sign for your vessel.
Draught	Draught is the vertical distance between the waterline and the bottom of the hull (keel), with the thickness of the hull included. Draft determines the minimum depth of water a ship or boat can safely navigate.
Name	Enter the name of your vessel.
ETA	**Estimated Time** of **Arrival** to destination entered below.
Destination	This is the destination your vessel is heading to. This should be entered before every journey ideally.
Ship type	This field should contain a number referring to the type of vessel you are using this transponder on. For example enter the number 36 for vessels using sail propulsion. For example enter the number 37 for pleasure craft (Yacht powered by engine).
Serial	This refers to the connection you are using between the transponder and the software. Find the right COM port for your transponder and click connect. This information can be found in the device manager on your PC. See chapter in manual on **checking the USB connections.**
Report set	How often (in seconds) Class B AIS signal will be broadcast by the transponder. **Do not set report to below 30 seconds.**

The transponder must know where your antenna is located to make accurate readings for other ships and your own. Please be as accurate as possible when writing this information down. You will need it to Configure the A042T.

A: Distance from bow to GPS antenna position 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 metres
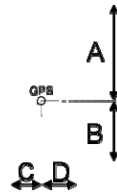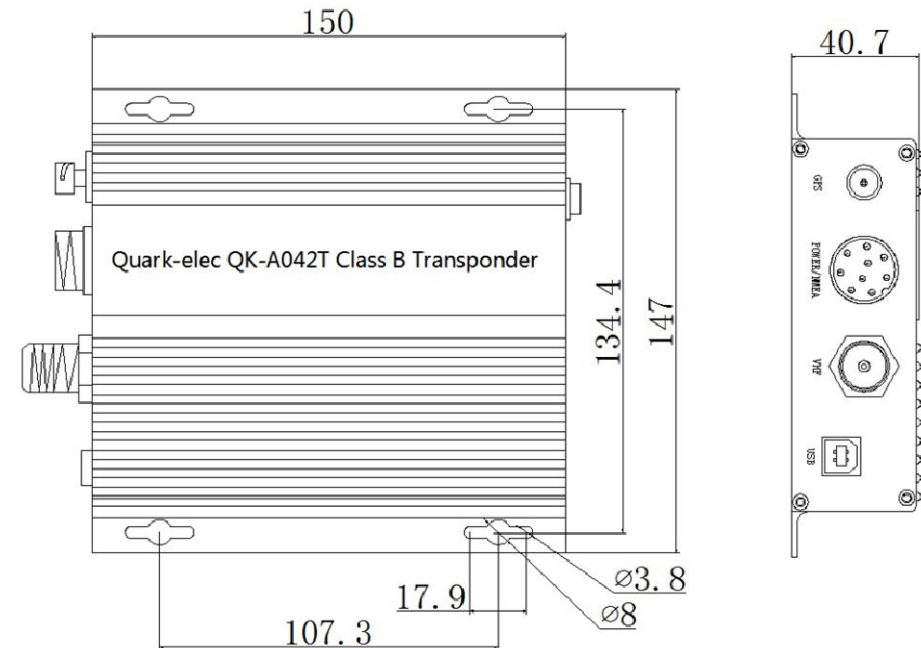
Note: Some of this information is legally required if using the A042T on water. Please check with your relevant authority or coastguard. Please input this information carefully.

Disclaimer

QUARK-ELEC

SET-UP GUIDE

QK-A042T
CLASS B TRANSPONDER

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

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

⚠️ **Certain countries require by law that class B transponders IMO and MMSI number configured into the device. This is done using the configuration tool. Detailed instructions can be found in the manual.**

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 LEAVE YOUR HOME:

Drivers and Configuration software are needed for specific features.

Before you leave your home: ensure you can load the driver and configuration software through the CD or through internet access (Download any software to your Windows laptop before travelling to your boat if needed). you will need to input the configuration information using Windows computer and configuration tool before using A042T on water.

Drivers: Will automatically install to your device if it is running Windows 10. If not, it is included on the FREE CD and as a download from www.quark-elec.com


INSTALLATION

1. Mounting: Consider your location…

- Dry, sturdy location.
- Ensure you have the correct length of cables needed for VHF, GPS and power source. If drilling holes for your cabling, seal around any holes to prevent damage to your vessel or equipment.

2. Connect your VHF Antenna

- 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 A042T 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 a good distance from each other. (at least 3 metres).
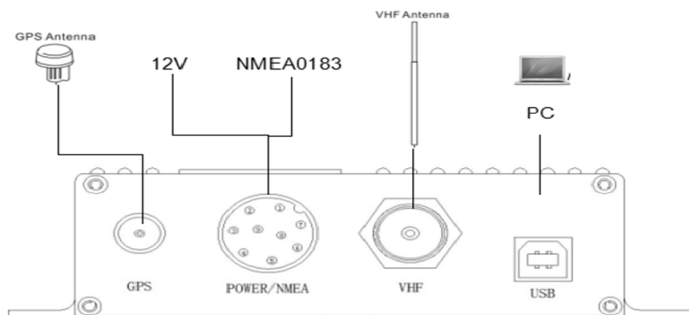
3. Connect your GPS antenna

- GPS antenna is connected via the TNC female bulkhead connector. The GPS antenna should be located outside where the sky is visible for best results.
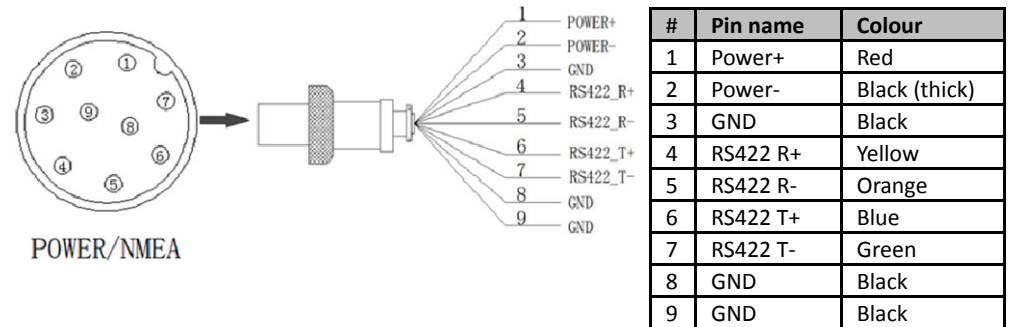
4. Connect Power

The A042T uses 12.0V power. This is connected via the POWER/NMEA cable. The power must be 12.0V; any more will damage the QK-A042T. **Do not put 12.0V power to ground (GND) as this will damage unit.** Once connected check the LED lights are Flashing green. lights indicate a valid AIS or GPS signal is being received by the A042T.
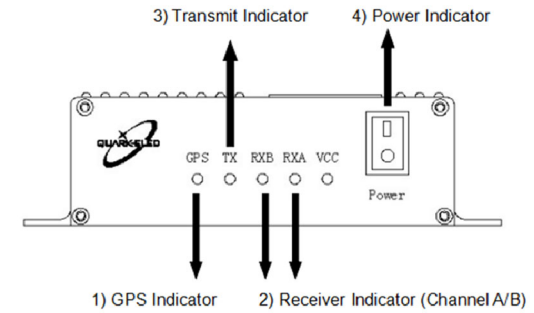
5. Disconnect power and connect NMEA input and output if desired.

The A042T uses NMEA 0183-RS422. If your connecting device uses the older NMEA-0183 RS232 standard you can connect to it using a Protocol Bridge (QK-AS03) see our website for details.

#	Pin name	Colour
1	Power+	Red
2	Power-	Black (thick)
3	GND	Black
4	RS422 R+	Yellow
5	RS422 R-	Orange
6	RS422 T+	Blue
7	RS422 T-	Green
8	GND	Black
9	GND	Black

6. Check connections and re-power your A042T.
Re-connect 12.0V power once all connections are correct. Check LEDs are still working.

7. Connect your A042T to a Windows computer using the provided USB cable.

Once you have installed the Configuration software (and drivers if needed) you are ready to enter your configuration information (see next page).