
Installation & Quick Start Guide

Aqua PC Range – Standard Aqua PC Version



1. Introduction

Congratulations on the purchase of your Aqua PC. It is recommended that your new computer is installed by a professional installer.

 Do not disconnect the White wire from the Red on the main power/data cable until you have read and understood the Remote Switch operation (Installation Step 3+4) explained in this Quick Start Guide.

2. Before you start

You will need the following items and tools to complete the installation:

- A USB Keyboard and Mouse
- A suitable Monitor with VGA or DVI-D input
- Access to 12V or 24V DC power supply where the unit is to be installed
- Crimps, terminal block or other connectors suitable for connecting DC/Signal wiring
- M3 or M4 screws or other fixings appropriate to the mounting location

If the Aqua PC has Windows pre-installed, you will need to authorise this copy of Windows by either connecting the computer to the internet or ringing the Microsoft automated telephone authorisation system.

Other optional items you may wish to have with you during installation include;

- Suitable USB Memory stick for transferring software and data
- A momentary action push button switch (push to make) if you want a remote power switch
- A powered USB hub if you intend to connect more than 3 USBs devices to the Aqua PC
- Original CDs/DVDs of the software you wish to install on the Aqua PC

3. Installation

Before starting installation select a suitable location for the Aqua PC. The unit is not water resistant and should be mounted in a dry location where it will not come in to contact with water or excessive moisture. When locating the unit you should consider:

- Routing of power, USB and NMEA cables to the unit
- Provision of sufficient space behind the unit for cable connections
- Getting access to the Aqua PC for plugging in USB devices and loading CDs/DVDs
- Maintaining the compass safe distance of 0.5m

Installation Step 1

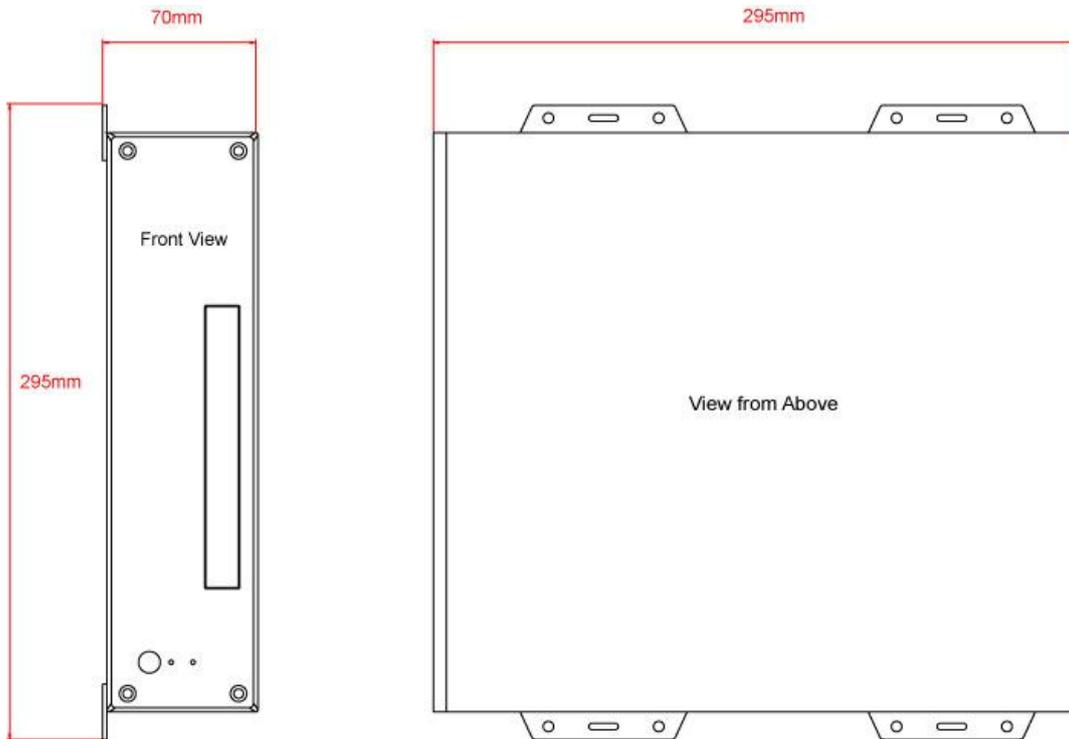
- Run a suitable 12v or 24v supply to the location where the Aqua PC will be mounted.
- The Aqua PC normally consumes around 1.5A at 12v but will consume more power if you are powering a 12v monitor or lots of USB devices from the Aqua PC.
- Ensure a suitable in-line fuse is fitted or circuit breaker (maximum 10A).
- Run any USB or NMEA interfacing cables to the location where the Aqua PC will be mounted.
- Do not make any connections yet.

 The USB Interface Standard specifies that USB cables should be no longer than 5m without using a special powered USB extender cable – ensure that the total USB cable length from the Aqua PC to any USB device is < 5m.

Installation Step 2

- The Aqua PC is supplied with four mounting brackets which are screwed (wrong way round) to the base of the Aqua PC for transit. Unscrew the brackets, reverse them and screw them back in place. Use suitable fixings (not supplied) to fix the Aqua PC to a flat surface – using the dimensions and details shown in the drawing below. Note that the unit may be installed in any orientation.

Fixing location drawing



i The Aqua PC is also supplied with two plastic stands that can be fitted if the Aqua PC is to be desk mounted as you would in an office or home environment – these are definitely not recommended for installation of a boat

Photo of Aqua PC Rear Panel

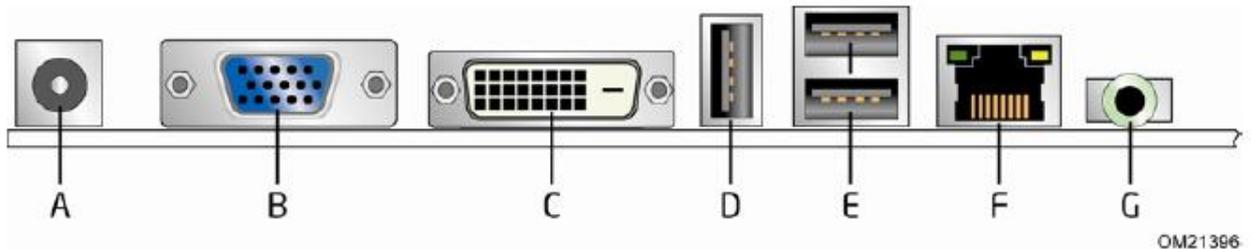


Installation Step 3

- On the rear of the Aqua PC is a single black cable that has nine wires. This is the Power/IO cable. Connect the Red (+) and Black (-) wires in the Power/IO cable to the ship's 12v or 24v supply.
- **Ensure that the supply is connected via a suitable fuse or suitable circuit breaker (in the positive power connection).** A 5A fuse/circuit breaker is recommended for most installations and 10A is the maximum value that should be used.
- You will note that there is a White wire soldered to the Red wire. This is the remote switch wire and should always be connected to the Red wire if no remote switch is required. The Aqua PC will not power up correctly if the White wire is disconnected from the Red wire and no remote switch is fitted – see wiring diagram.
- Do not try to turn on the Aqua PC yet.

Installation Step 4

- The connections on the rear of the Aqua PC are as follows;

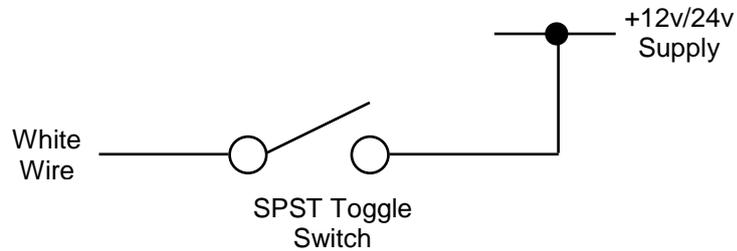


Item	Description
A	12 V power connector
B	VGA port
C	DVI-D connector
D	USB port
E	USB ports
F	LAN connector (RJ-45)
G	Audio line out

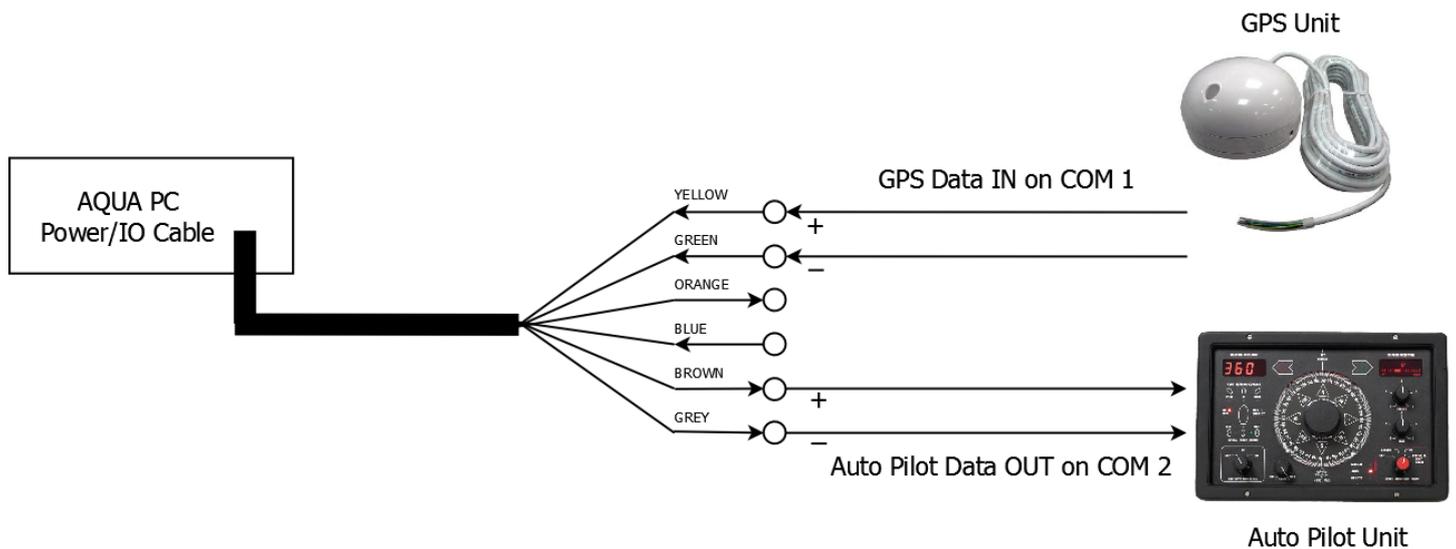
- The wires in the nine core Power/IO are as follows;
 - RED - Power + (12v or 24v)
 - BLACK - Power – (0v)
 - WHITE - Remote Power Switch
 - ORANGE - COM 1 TX+
 - YELLOW - COM 1 RX +
 - GREEN - COM 1 Ground (-)
 - BROWN - COM 2 TX+
 - BLUE - COM 2 RX+
 - GREY - COM 2 Ground (-)
- Connect a USB mouse and keyboard to the any of the three USB ports on the Aqua PC
- Connect a suitable monitor or monitors to the VGA and/or DVI-D connectors on the Aqua PC
- If you are using an LCD monitor that requires a 12v regulated DC supply, then it is possible to provide this DC supply from the Aqua PC (up to 7A). Connect the monitors power input to the 12v Power Connector on the rear of

the Aqua PC. This will require the construction or sourcing of a suitable lead but the DC jack plug type connector is very common and can be sourced from any good electronic component shop. **NOTE: Centre pin is positive.**

- To connect a remote power switch for the Aqua PC, at another location in the boat, simply remove the white wire from the red wire and connect the white wire to the ship's supply (+12v or +24v) via a SPST toggle switch as shown below.



- To connect NMEA devices to the Aqua PC you can connect them directly to the two COM port wires in the Power/IO cable. A couple of typical examples are shown below;



- Once all devices are correctly connected to the Aqua PC ensure the 12v or 24v power is connected i.e. the circuit breaker is ON (if fitted) and then turn on the remote toggle switch and the Aqua PC will power up. As you turn on the remote switch, the Power and Hard Disk LEDs on the front face of the Aqua PC should come on as the PC starts its power up sequence.
- Installation is now complete.