

AQUA COMPACT PRO+ MARINE PC

Installation and instruction Manual



1. Introduction

Congratulations on the purchase of your Aqua Compact Pro+ PC. It is recommended that your new computer is installed by a professional installer. **The Aqua Compact Pro+ PC is 12v ONLY** and must not be connected directly to a 24v DC supply. Please consult your dealer or with Digital Yacht on suitable 24v to 12v DC-DC adaptors.

 Due to different battery banks, AC supplies, inverters, grounding, etc. on boats, always connect and disconnect devices and cables to the Aqua Compact Pro+ PC with the PC and other devices turned off – particularly USB and Monitor cables.

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 HDMI input (or DVI-D but you will need a suitable HDMI to DVI-D cable)
- Access to 12V 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 Compact Pro+ PC has Windows pre-installed, then this will have been authorised with Microsoft during production. If you are installing Windows yourself, don't forget that you will need to authorise the 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 powered USB hub if you intend to connect more than 4 USBs devices to the Aqua Compact Pro+ PC
- An external CD/DVD drive that can connect to the Aqua Compact Pro+ via USB cable, if you have original CDs/DVDs of software that you wish to install on the Aqua Compact Pro+ PC

3. Installation

Before starting installation select a suitable location for the Aqua Compact Pro+ PC. The unit is not water resistant and must be mounted in a dry location to avoid 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 Compact Pro+ 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 DC supply to the location where the Aqua Compact Pro+ PC will be mounted.
- The Aqua Compact Pro+ PC typically consumes 1A at 12v but will consume more power (up to 5A) if you are doing lots of graphic calculations or powering lots of USB devices from the Aqua Compact Pro+ 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 Compact Pro+ PC will be mounted, but do not make any connections yet.

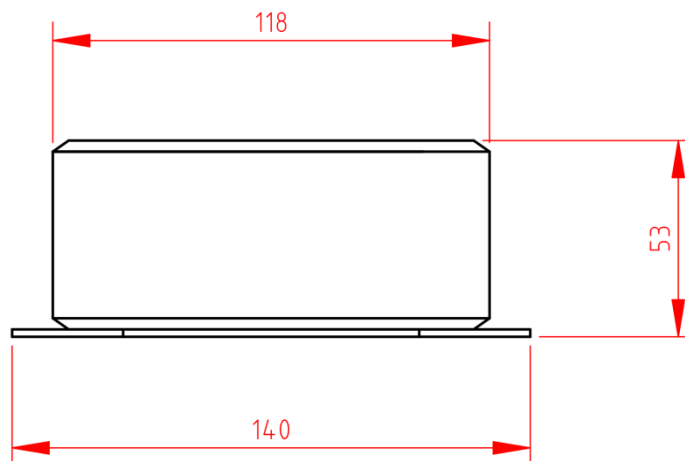


- i** The USB Interface Standard specifies that USB cables should be no longer than 5m without using a special powered USB extender cable – ensure that the total USB cable length from the Aqua Compact Pro+ PC to any USB device is < 5m.

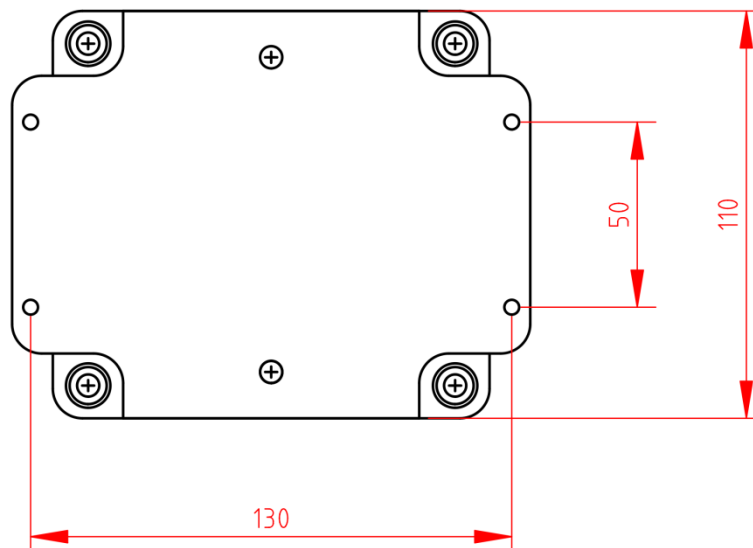
Installation Step 2

- The Aqua Compact Pro+ PC is supplied with a mounting bracket. Use suitable fixings (not supplied) to fix the Aqua Compact Pro+ PC to a flat surface – using the dimensions and details shown in the image below. Note that the unit may be installed in any orientation.

Dimensions



Mounting Plate



Installation Step 3

- On the rear of the Aqua Compact Pro+ PC is a 2.5mm DC jack socket which the supplied power cable should plug in to. Connect the Red (+) and Black (-) wires in the Power cable to the ship's 12v DC 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.



- Please note that the Aqua Compact Pro+ enclosure is internally connected to the negative supply. **Extreme care should be taken when routing positive supply cables close to the Aqua Compact Pro+** and you should not secure the Aqua Compact Pro+ on to a metallic or conductive surface as this may affect the boat's grounding. Always ensure that the Aqua Compact Pro+ enclosure and any USB and HDMI cables are not connected to the boat's ground.
- Always power down the Aqua Compact Pro+ PC before connecting USB, Network or HDMI cables from other devices.
- Try to ensure that all devices connected to the Aqua Compact Pro+ PC are powered from the same boat's DC supply that is powering the Aqua Compact Pro+. This will avoid potentially damaging, differences in ground voltages.
- Do not try to turn on the Aqua Compact Pro+ PC yet.

Installation Step 5

- The Motherboard connections and features of the Aqua Compact Pro+ PC are as follows;

Highlighted Features

- 1 7th generation Intel® Core™ i7-7567U processor
- 2 Intel® Iris™ Plus Graphics 650
- 3 Two DDR4 SO-DIMM sockets (up to 32 GB, 2133 MHz)
- 4 1x SATA3 port for connection to 2.5" HDD or SSD
- 5 M.2 slot with flexible support for a 42 or 80 mm M.2 SSD
- 6 Intel® Optane™ Memory ready
- 7 Intel® Dual Band Wireless-AC 8265 and Bluetooth* 4.2
- 8 Back panel DC power connector (12–19V)
- 9 One full-size HDMI* 2.0 display port supporting 8 channel audio (7.1 surround sound)
- 10 Intel® Gigabit LAN
- 11 Two USB 3.0 ports on the back panel
- 12 Thunderbolt™ 3 port with support for USB* 3.1 gen 2, DisplayPort* 1.2 and 40 Gb/s Thunderbolt
- 13 Kensington lock support
- 14 Support for user-replaceable third-party lids
- 15 Micro SD card slot
- 16 Consumer infrared sensor
- 17 Two USB 3.0 ports (including one charging port) on the front panel
- 18 Front panel headphone/microphone jack
- 19 Front panel power button
- 20 Dual-array front microphones
- 21 Multi-color front panel LED ring



- All four USB ports are USB 3.0 and the yellow port on the front panel is a high current charging port, for tablets and phones.
- Connect a USB mouse and keyboard to the any of the four USB ports on the Aqua Compact Pro+ PC
- Connect a suitable monitor or monitors to the HDMI and/or Thunderbolt 3 Port connectors on the Aqua Compact Pro+ PC..



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- To connect NMEA devices to the Aqua Compact Pro+ PC you will need either;
 - A Digital Yacht USB to NMEA0183 adaptor (P/No.ZDIGUSBNMEA)
 - One of the Digital Yacht Wireless NMEA products; WLN10, NavLink, iNavHub, iAIS or PilotLink
 - A suitable NMEA2000 gateway such as our iKommunicate
 - Once all devices are correctly connected to the Aqua Compact Pro+ PC ensure the 12v DC power is connected i.e. the circuit breaker is ON (if fitted). Press the Power switch on the front of the Aqua Compact Pro+ PC and the Power and Hard Disk LEDs should come on as the PC starts its power up sequence.

Installation is now complete.