AQUA4D

H-A Pro
User Manual
v1.3

1. Safety instructions

Only qualified personnel are authorized to perform the installation, commissioning, configuration and maintenance of AQUA4D® systems. He or she must have received the operator's authorization to carry out the specific operations.

The electrical connections for the electronic control boxes (Command), as well as the installation of the Treatment Units (TU), may only be established by specialized staff. These staff must have read this operating manual and must comply with the instructions therein. Before commissioning the system, check once again that all the connections have been correctly established and that the electric cables and pipe fittings are not damaged. Do not operate damaged machines and ensure that you protect them from being started up accidentally.

Mark these machines as defective. Any repairs that are not set out in this manual may only be carried out by an authorized after-sales service. The AQUA4D® system was built and inspected in accordance with our quality requirements and left our facility in perfect technical condition, in compliance with applicable European technical and safety directives and standards. As the installer and/or user, you are responsible for complying with the safety instructions set out in the installation instructions in this manual and the local standards and directives.

If your AQUA4D® system has to be repaired, please clean it before returning it to the after-sales service and use the original packaging.

2. Introduction

The AQUA4D team is very glad that you choose to put your trust in our product and acquire an H-A PRO system for your installation. The PRO series have been designed to be equipped on a wide range of applications, this document will explain the specifics when installing in **buildings.**

It can go from a individual house to a city global water network, the system will have to be sized according to the water flow of the network. This document will help you install and start using your AQUA4D H-A PRO system, but please feel free to call your AQUA4D contact or distributor if you need any help, we will be glad to help get started and start improving the way you can irrigate with AQUA4D.

3. Contents

1x H-A PRO Control Unit (CU) 1 or more H-A PRO Treatment Unit (TU) 1 or more Connexion cable TU-CU, 2 meters 1x Documentation leaflet
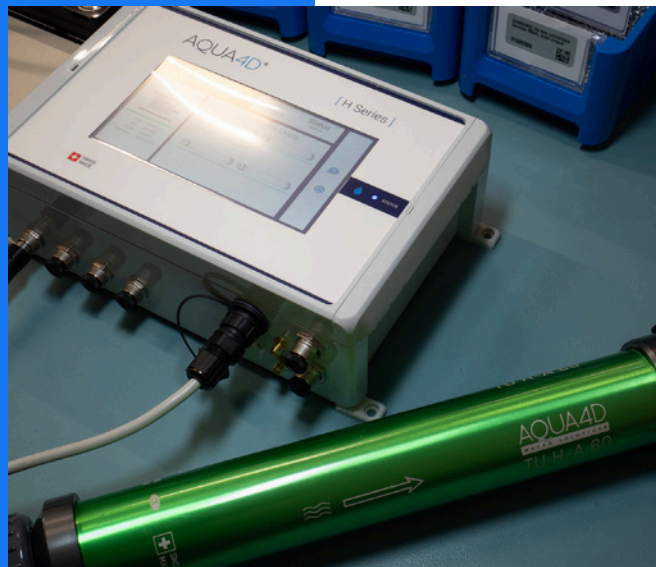
4. System information

This document will cover all the points to setup your new AQUA4D PRO system for optimal operation. Please read the entire document before you start working on the system itself.

4.1. Field of application

The AQUA4D water-treatment system is used in several fields of application. The modularity of the AQUA4D means that it can be adapted to the most diverse situations, using various different modules. The AQUA4D can therefore be optimally adapted to the specific issues to be resolved. The AQUA4D PRO **H-A** version is fully compliant with the requirements of water networks used in agriculture and in livestock management/breeding
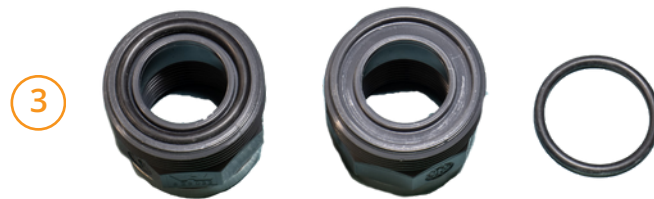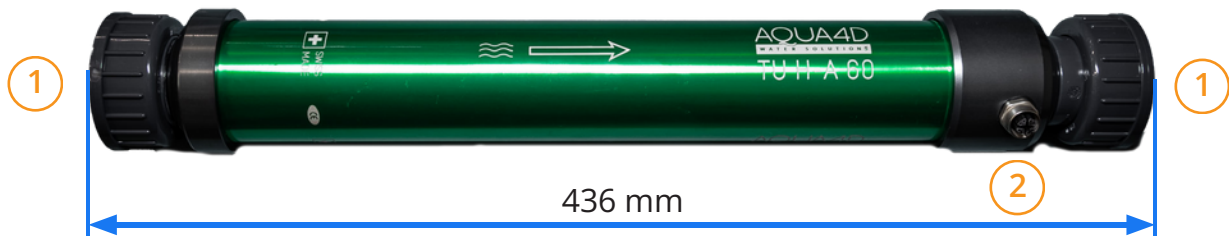

4.2. Specifications Control Unit

1. Outputs 1 to 4
2. Power (100 to 230 VAC)
3. Synchronization IN and OUT
4. Comms antennas
5. Pressure compensator

Size 28 x 19 x 10 cm
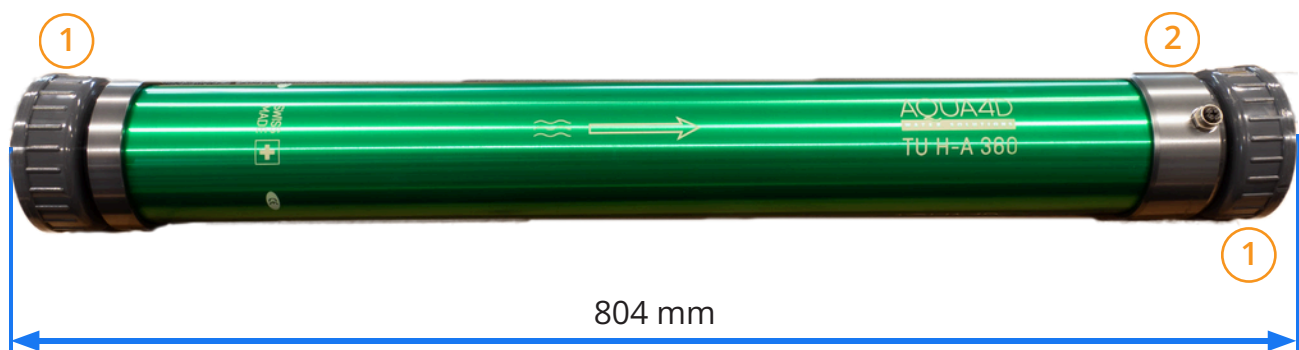**Material** Polycarbonate
Weight 1.7 kg

4.3. Specifications TU 60

436 mm

1. Union nut supplied with a 1" fem adapter
2. Connector (8 poles)
3. 1" Adapters with O-rings

Max flow 60 l/min **Length** (no gaskets) 436 mm

4.4. Specifications TU 360

804 mm

1. Union nut supplied with a 2" fem adapter
2. Connector (8 poles)
3. 2" Adapters with O-rings

Max flow 360 l/min **Length** (no gaskets) 804 mm
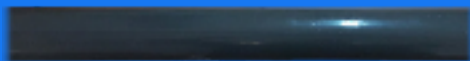
5. Installation

5.1. Environment

• Protection rating : IP65
• The device is designed for indoor or outdoor use. However, the device must be installed in a location that is sheltered from bad weather and sunlight.
• Operating temperature: 0 - 45 [°C]
• Normal humidity: 0 - 95% without condensation
• Maximum operating altitude: 3000 m
• Pollution degree 2
• AC power supply voltage fluctuations tolerated : up to 10% of the nominal voltage
• Over voltage category II

5.2. Instructions

The system is installed and the water network and therefore require a specialist (plumber) to be put together correctly.

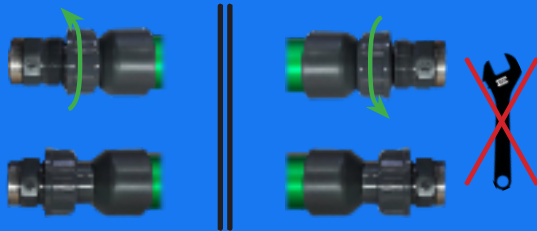|		
1		Pipe before installation
2		Cut the pipe, the distance varies according to the treatment unit (TU) and the fittings used.
3		Prepare the pipe with fittings (not included) compatible with the provided adaptor nipples.

4 TU size

Screw the 2 adaptor nipples on the fittings. Check presence of the o-rings. Check the distance according to your TU specifications,

5

Screw by hand the TU on the adaptors. **Do not use tools**, hand tighten only.
The arrow on the TU must point in the direction of the water flow.

6

Open the water flow and gradually increase the pressure. If a leak appears, remove the TU, fix the leak then mount the TU back.

5.3. Connecting the power supply

The system needs to be connected to the power network. The system is equipped with a power plug of one of those three types, depending on the country your are ordering from :

Switzerland, type J
Europe, type E
USA, type B

If you have a different type of power outlet, use the adequate adapter.
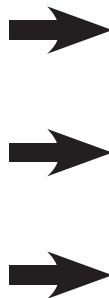

Swiss and European power cables

Power connector

5.4. Connecting the antenna

The H-A Pro can be equipped with a dual function antenna that can provide the location and send data about the system to the AQUA4D monitoring portal (not yet available) and for remote updates. The antenna will need access to an LTE-M network to be able to communicate correctly.

Connect the antenna to the **2 connectors** on the Control Unit. Choose a good location for the antenna, preferably high and away from big metal parts that might shield the signal. Secure the cables to avoid accidental pulling.

The antenna can be secured with the magnet inside its base or with the provided double sided tape.
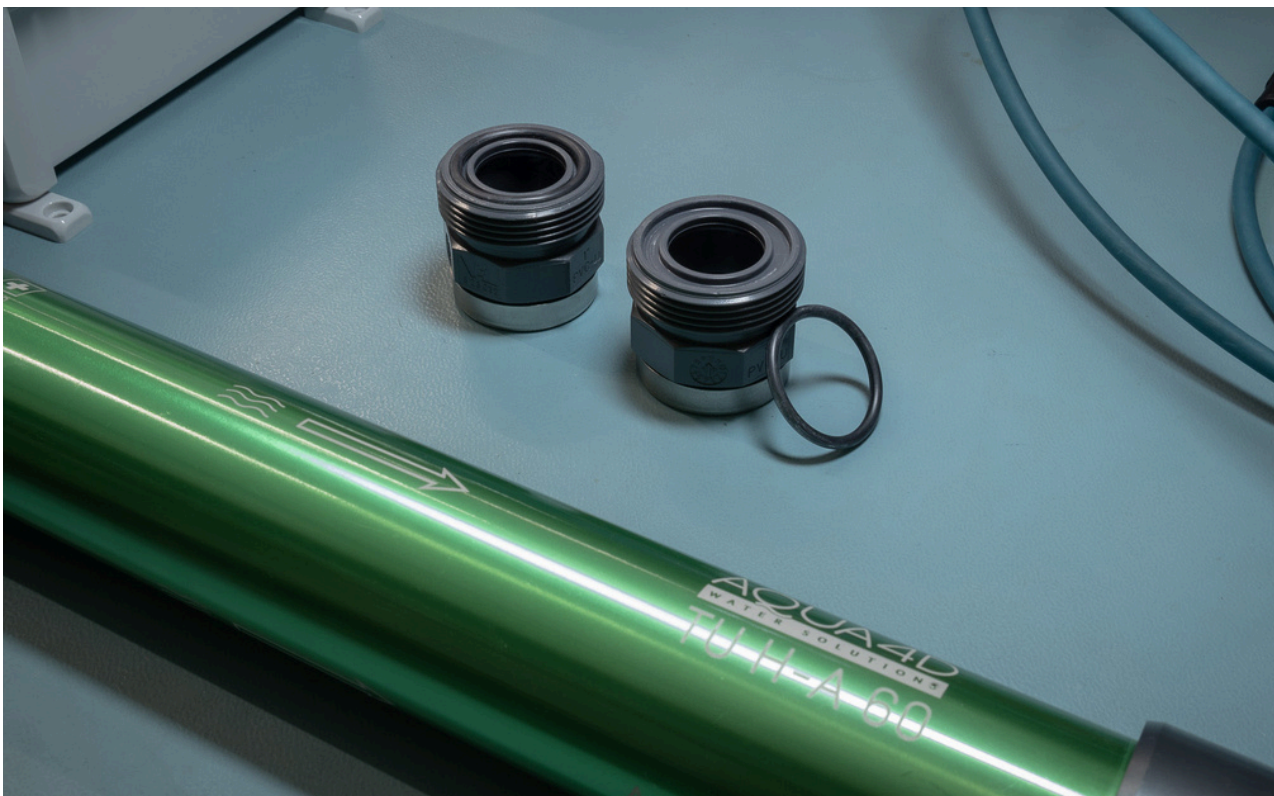

Magnet on steel

Double sided tape on plaster wall

5.5. Opening the water flow

The system is now ready to treat the water. To ensure a smooth start, increase the water flow gradually to avoid damage to the piping network. During this process, if you notice any leak on the treatment unit, stop the water flow and tighten the bolts a bit more. Then start again and see if the leak is gone. If you are unable to achieve a watertight system, please contact a specialist of the AQUA4D support.

Once you have reached the optimal water flow and pressure for your network, the installation of your AQUA4D PRO system is done.

6. Control Unit Operation

The Control Unit is preconfigurated in our factory and is ready to go as soon as it is powered.

Here's a list of the settings that can be changed or updated if the need arises.

- *Language*
- *Time*
- *Date*
- *Number of Treatment Units connected*

To access these settings, restart the CU either by using the "power" ⏻ icon on the screen or by turning it off and on again with the main electrical switch
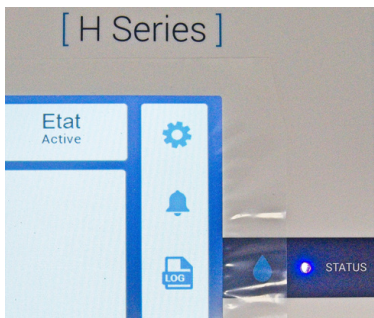
The system will reboot and you will see a "**START**" button below the AQUA4D logo, press that button to enter the initialisation menu.
(Be mindful that if you don't press that button, the Control Unit will start itself using the last known configuration.)

You will then be guided through the different settings and when you're done the Control Unit will go to its normal operation mode.
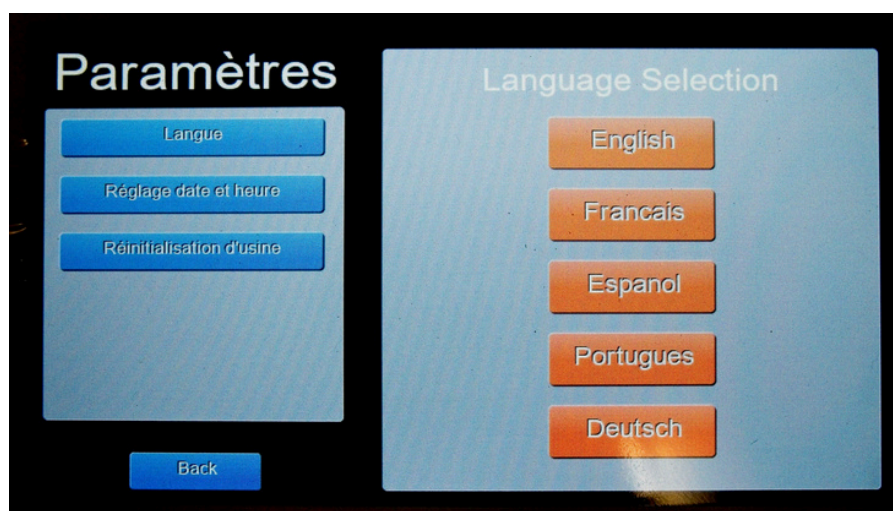
7. Settings

To access the settings menu, press the "settings" icon ⚙
and enter code **111**.

The following options can then be modified:

- Time
- Date
- Language
- Factory reset

AQUA4D

7. Troubleshooting

The Control Unit screen stays dark and the "status" light is off
Verify that the power supply is turned ON and the power cable correctly connected to the power box

Their is water coming from inside the AQUA4D H PRO system
Stop the water flow and contact your distributor or the AQUA4D support.

Unable to connect the Treatment Unit (TU)
Make sure that the pipes threads are compatible with the treatment units 1 or 2" adapters.

Water is leaking from one of the adapter
Tighten the union nut a little bit more, be careful not to apply to much force, it may damage or brake the treatment unit.

My problem is not listed here
Please contact your supplier or the AQUA4D support and describe your problem.

8. Contact information

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