AQUAMASTER®
TOOLS

C800 Pro Controller Inline

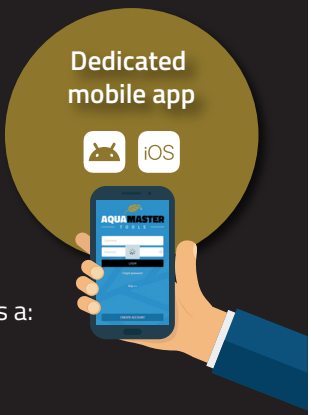
Automatic pH/EC Dosing System

User manual

INTRODUCTION

The Aqua Master Tools C800 Inline pH EC Controller and Temp Meter is a versatile, all-in-one solution for monitoring and regulating water quality and nutrient levels in cultivation or water systems. This advanced device continuously measures and controls pH, EC, and temperature, ensuring optimal conditions at all times.

The C800 works seamlessly with or without the Aqua Master Tools app, available for Android and iOS. The app enables remote configuration, access to measurement history, and alarm notifications for instant updates. Additionally, the device itself stores up to one year of historical data for on-site review.



Featuring a full-color touchscreen and calibration indicators, the C800 is designed for ease of use. Its flexibility allows it to function as a:

- Standalone pH controller (supports up to one dosing pump).
- Standalone EC controller (supports up to five dosing pumps).
- Combined pH and EC controller, operating both functions simultaneously.

Customisable with modular pumps

The modular dosing pumps for the C800 are available in sets of 1, 2, or 3, letting you customize your setup to meet specific requirements. Dosing configurations can be adjusted and saved to the cloud via the app for easy reuse.

C10

1-Pump Unit:
pH dosing pump or nutrient dosing (EC, PPM, TDS).

C20

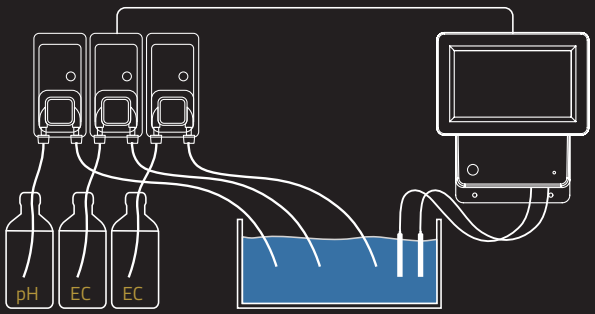
2-Pump Unit:
Nutrient dosing (EC, PPM, TDS).

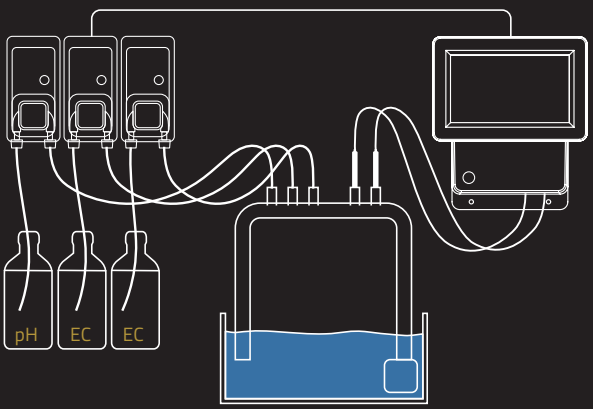
C30

3-Pump Unit:
Nutrient dosing (EC, PPM, TDS).

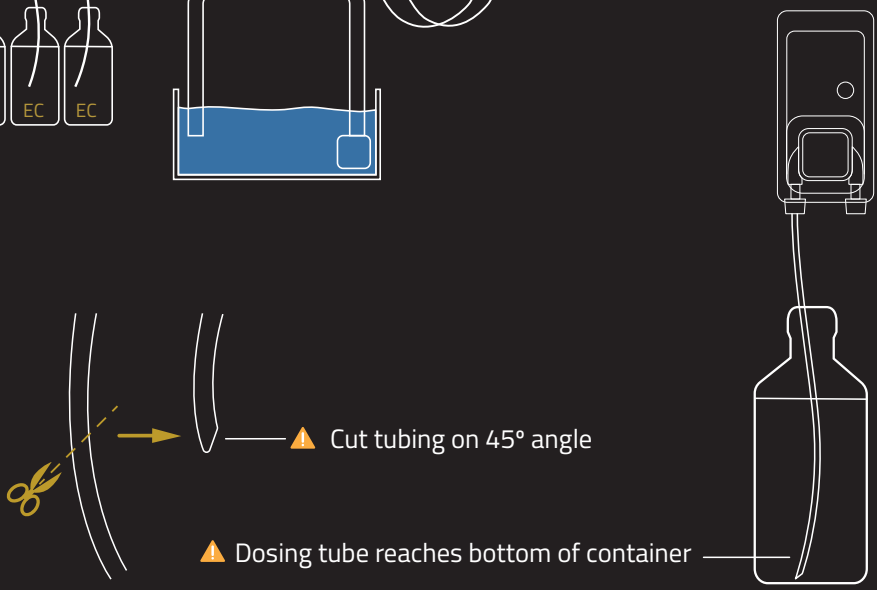
Designed for batch tank setups, the C800 offers two operational modes:

1. **Direct Measurement and Dosing in the Water Basin (Batch Tank):**
   Measure and dose directly into the water basin. Ensure dosing tubes are placed apart to prevent interference (see image).





2. **Inline Measurement and Dosing in a Circulation Line:**
   Measure and dose within a circulation system (see image).



The C800 delivers precision, flexibility, and user-friendly operation, providing complete control over water quality and nutrient management.

TABLE OF CONTENTS

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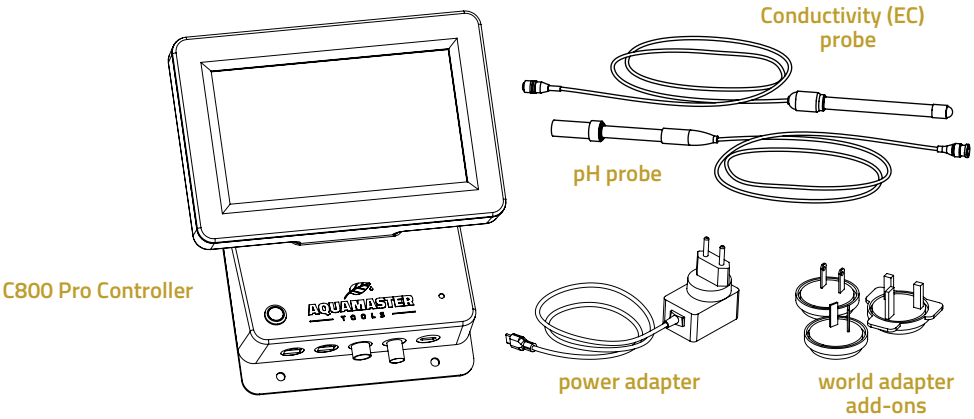
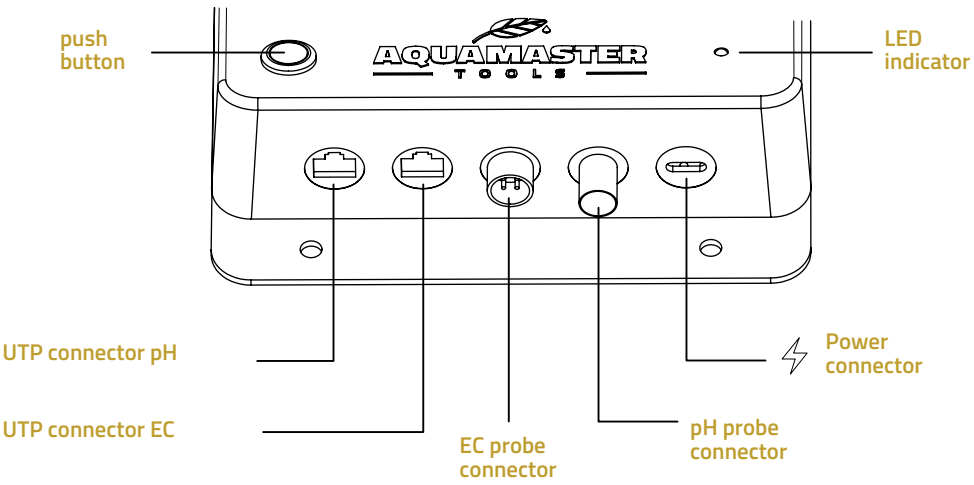
1. What's in the Box

The package includes:

- C800 Pro Controller Inline
- Power adapter
- pH probe
- EC probe (for measuring both EC and temperature in a single probe)



2. Connecting the controller



3. Combination options for modular dosing pumps

The C800 Pro Controller Inline is fully modular and can be customized to meet specific user requirements. This flexibility allows users to purchase and install peristaltic pumps as needed, depending on their system's demands.

The controller can be configured as:

- **Standalone pH Controller**
- **Standalone EC Controller**
- **Combined pH and EC Controller**

Note: A maximum of one pump can be used to control pH up or down.

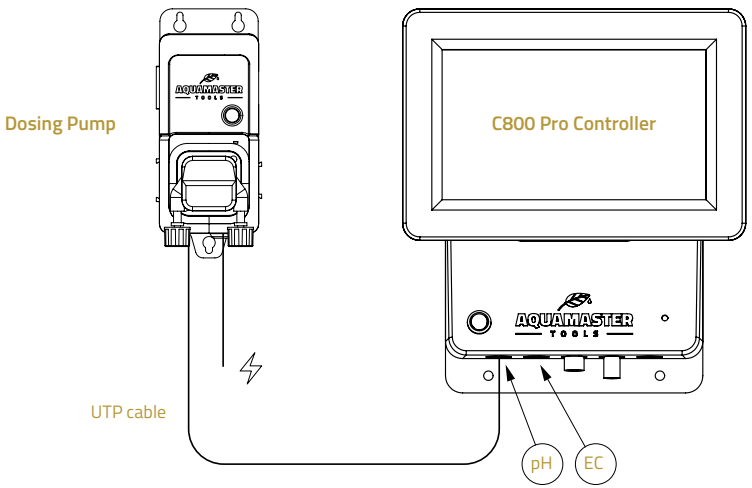
Nutrient Dosing

The C800 Pro Controller Inline supports 1 to 5 pumps for nutrient dosing. Pump sets are available in the following configurations:

- Sets of 1, 2, or 3 pumps

⚠ **Important:**

- The order of the dosing pumps determines the numbering in the controller menu. This works logically from left to right.
- Connect the pH pump to the left UTP connector and the EC pumps to the right UTP connector. Reversing these connections will result in improper operation.



Connection of pH and EC Pumps

Connection of the pH Pump

- **1-Pump-Block C10:**
  The C800 Pro Controller Inline supports a maximum of one pH pump, which connects to the left UTP port of the controller. This pump does not require a pump number in the controller menu.
  - The pH pump can be configured to increase pH (pH+) or decrease pH (pH-).

Connection of EC Pumps

The right UTP port is used to connect the EC pumps for dosing nutrients. Up to 1 to 5 EC pumps can be connected, with specific pump numbering as follows:

- **1-Pump-Block C10:**
  - Used when dosing a single nutrient.
  - If used alone, this pump is assigned Pump 1 in the controller menu.
  - If paired with a 3-Pump-Block, this pump is assigned Pump 4.

- **2-Pump-Block C20:**
  - Two pumps are assigned Pump 1 and Pump 2 in the controller menu.
  - When paired with a 3-Pump-Block, these pumps are assigned Pump 4 and Pump 5.

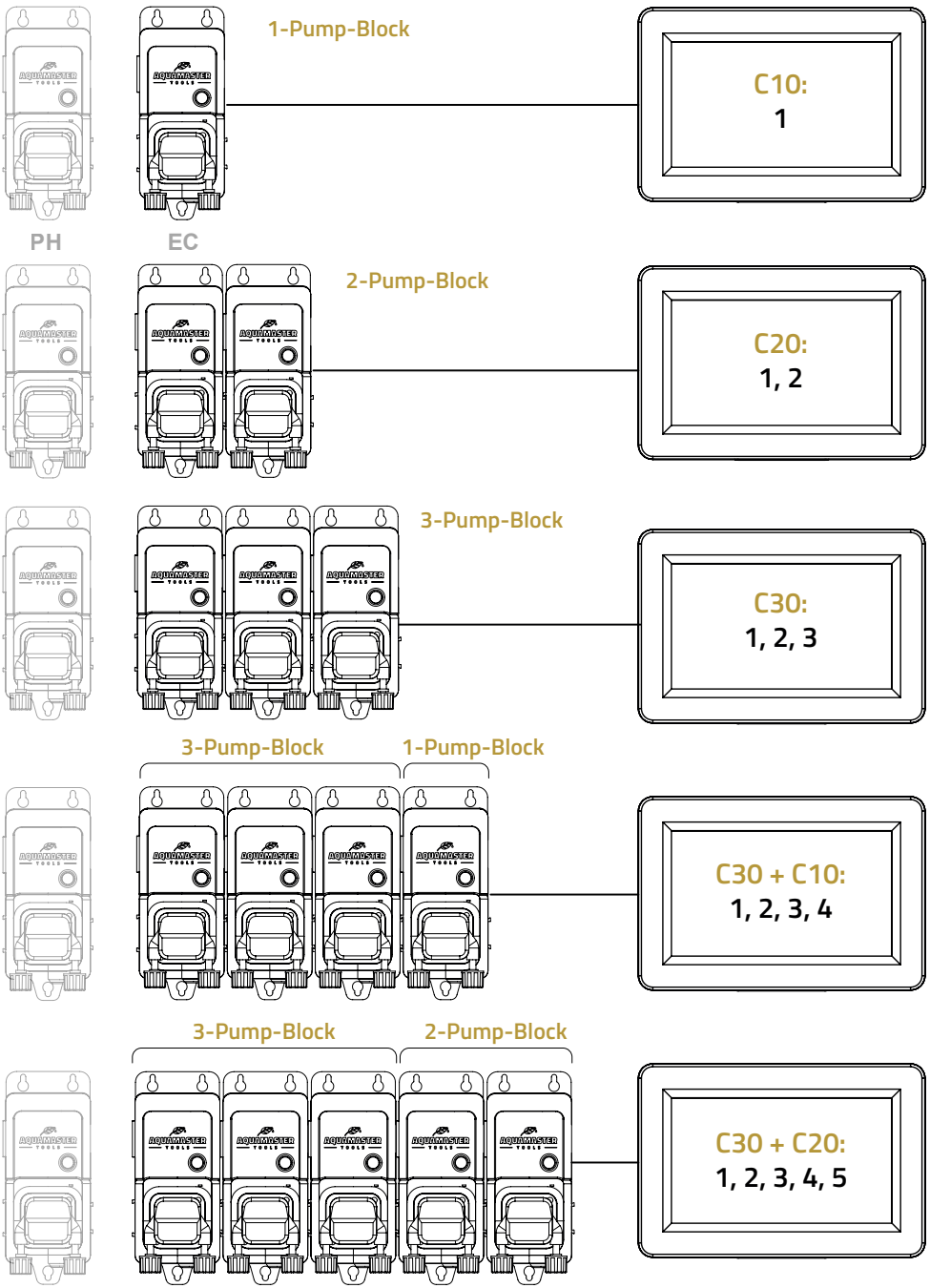
- **3-Pump-Block C30:**
  - Three pumps are assigned Pump 1, Pump 2, and Pump 3 in the controller menu.

- **4 Pumps (Combination of 3-Pump-Block (C30) and 1-Pump-Block (C10):**
  - A setup with 4 pumps is created by combining a 3-Pump-Block (C30) with a 1-Pump-Block.

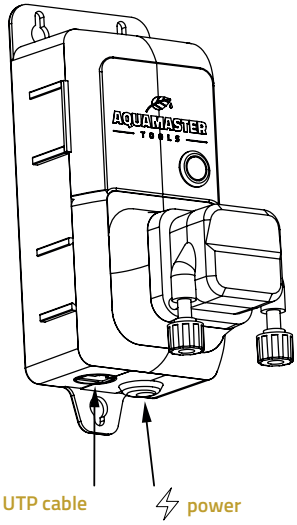
- **5 Pumps (Combination of 3-Pump-Block (C30) and 2-Pump-Block (C20)):**
  - A setup with 5 pumps is created by combining a 3-Pump-Block (C30) with a 2-Pump-Block (C20).

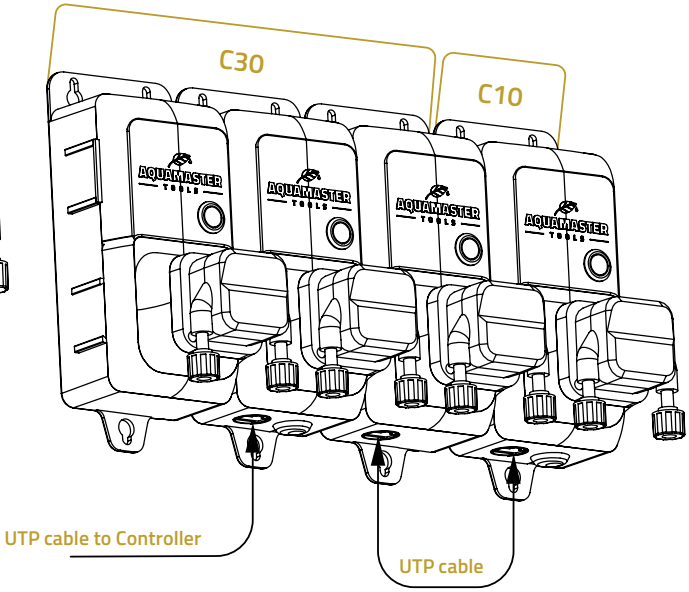
⚠ Important Notes

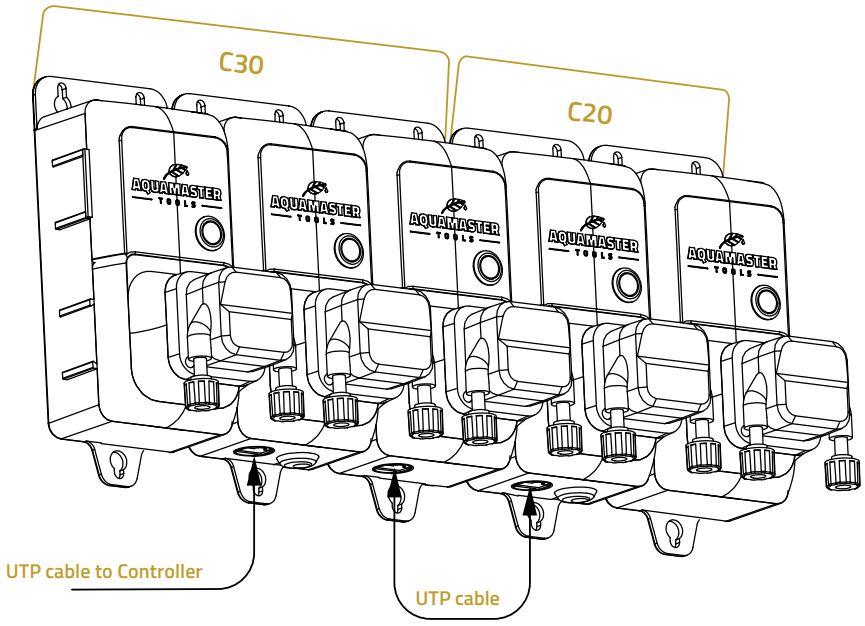
- Only the pump combinations listed above are supported.
- It is not possible to connect more than 5 EC pumps to the controller. Any configuration with 6 EC pumps is unsupported and will not function correctly.


1-Pump-Block
C10:
1
PH
EC
2-Pump-Block
C20:
1, 2
3-Pump-Block
C30:
1, 2, 3
3-Pump-Block
1-Pump-Block
C30 + C10:
1, 2, 3, 4
3-Pump-Block
2-Pump-Block
C30 + C20:
1, 2, 3, 4, 5

⚠ Important: When using pump combinations with 2 different Pump-Blocks, an additional UTP cable must be used to connect them, as shown in the images.







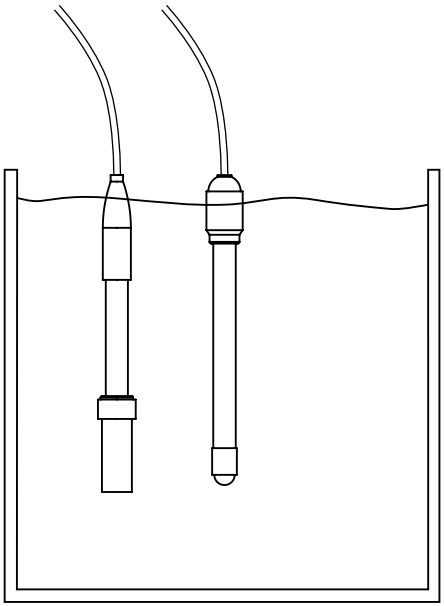
4. Placement of the probes

For accurate and reliable measurements, ensure all probes are fully submerged in the solution. The pH probe provides precise pH measurements, while the EC probe measures conductivity and includes a built-in temperature sensor for automatic temperature compensation (ATC).

⚠ **Important:** Avoid direct contact between concentrated nutrients or pH adjusters and the probes when they are placed in the reservoir, as strong acids may damage the probes or trigger alarms. For optimal results, ensure the probes are placed in a well-mixed area of the solution or for the inline dosing valves with the flow direction when measuring and dosing inline. **It is also important to ensure that water always flows through the pipeline when using inline probes.**

Steps for Proper Probe Placement:

1. **Remove Storage Cap:**
   Twist the storage cap to loosen it, then carefully slide it off the pH probe.
2. **Attach Probe Holders (Optional):**
   If using an inline probe holder, ensure the probe is securely placed and firmly fixed in position to avoid any movement or misalignment.
3. **Submerge pH Probe:**
   Place the pH probe into the tank or reservoir. The pH probe can be fully submerged in the solution.
4. **Position EC and Temperature Probes:**
   Position the EC probe (which also measures temperature) in the solution alongside the pH probe to ensure accurate conductivity readings and automatic temperature compensation.

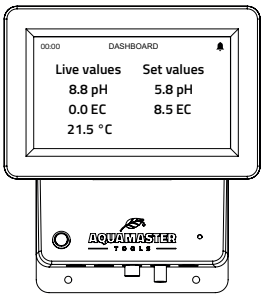


5. Operation and Use

5.1 POWERING ON THE CONTROLLER

When power is connected, the C800 Controller will automatically start up. During startup, a loading bar will be displayed. The controller should fully boot within 10 seconds, at which point the dashboard will appear on the screen.

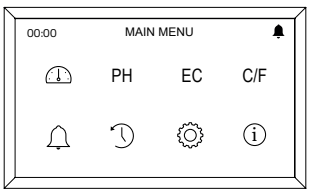
5.2 DASHBOARD



The Dashboard displays the following information:

- Current time
- Alarm notifications
- Live readings for pH, EC, and temperature
- Status of automatic dosing (on or off) for pH and EC
- Desired/set values for pH and EC (displayed on the right side of the screen)
- If the pH or EC dosing status is pressed between the live and set values, you can go directly to the dosing settings for pH or EC

5.3 MAIN MENU



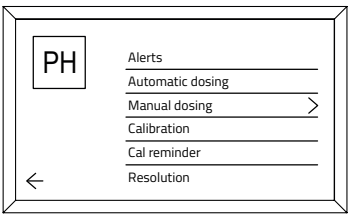
By tapping anywhere on the dashboard, the user will be directed to the main menu.

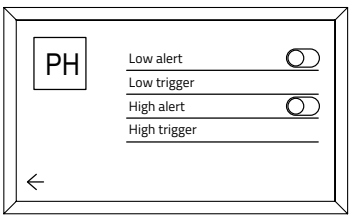
To return to the dashboard, simply select DASHBOARD.

5.4 PH, EC, AND TEMPERATURE ALARMS

The user can easily enable or disable alarms for pH, EC, or temperature. Follow the steps below to set an alarm for a specific parameter:

1. From the main menu, navigate to the parameter for which you want to set an alarm.
2. Select the Alarms (Alerts) option.
3. Set the desired high and/or low alarm triggers. Tap the pH, EC or temp trigger value to open the keypad at high or low trigger and enter the desired trigger value.





Effect of Alarms on the Dashboard

- Green display: The live value of the parameter is within safe limits.
- Red display: The live value is outside the set limits (SET VALUE) and is in an alarm state.
- Gray display: Alarm is disabled.

When an alarm is triggered:

- A notification will appear on the dashboard.
- The alarm will be stored under Alerts.
- If connected to the app, the user will receive a notification on their phone.

Effect of Alarm Triggers on the History Page

Regardless of whether alarms are enabled or disabled, adjusting the alarm triggers will zoom in or out on the historical graph. This allows smaller fluctuations in values to be more visible.

To ensure the full range is shown in both historical and live graphs, it's important to set alarm triggers to the minimum and maximum values. Otherwise, parts of the range may be hidden and not visible.

Application of Alarm Notifications

Alarms can be used to signal:

- Running out of nutrients or pH adjusters (pH up/down).
- Issues with electrodes or water supply.
- Problems with dosing pumps.
- Dosing settings are incorrect, meaning the correct values are not achieved.

A constant alarm notification indicates that one of these factors requires attention.

5.5 pH OR EC DOSING

The C800 Pro Controller Inline can be used as a standalone pH controller, a standalone EC controller, or both simultaneously (pH and EC). The automatic control of pH and conductivity (EC) is achieved through dosing. The Aqua Master Tools Pro Controller manages this process via a dosing cycle, consisting of an On time and an Off time.

- **On time**: This is the duration during which the pH up or down or nutrient solution is added to the reservoir. The unit doses at 2 ml per second (depending on liquid viscosity; see "Tips, Tricks, and Maintenance" for more details). For a 100 ml dose, this takes 50 seconds.
- **Off time**: This is the pause between each dosing cycle. During this time, the controller continuously measures the solution to determine when the values have stabilized, preventing immediate re-dosing.

It is essential that the solution in the reservoir circulates constantly to ensure even mixing and accurate measurements.

⚠

IMPORTANT:

- If the On time is too short, the controller may not dose enough to keep up with changing nutrient or pH levels, even if it doses with each cycle.
- If the On time is too long, the value may overshoot, as a single dose could change the value beyond the desired range.
- If the Off time is too short, the pH or nutrient solution may not be properly mixed in the reservoir, causing the controller to dose prematurely, which can result in overshooting the desired value.
- If the Off time is too long, nutrient or pH levels may fluctuate too much between doses.

HINT:

To estimate the mixing time in the reservoir, manually add enough nutrient to significantly alter the conductivity value, and time how long it takes for the conductivity to stabilize (Mix) after the addition.

Viscosity and Dosing Volume Control

The dosing pumps are set to dose a standard 2 ml per second. However, the viscosity of the liquid can affect the actual volume being dosed. Liquids with higher viscosity may move more slowly through the pump, while less viscous liquids are dosed more quickly.

How to Check the Dosing Volume:

1. Set the manual dosing function to 60 seconds and ensure the tubes are properly filled with no air bubbles.
2. Make sure each tube is dosing into a measuring cup.
3. Run the pump for 1 minute and measure how many ml each pump has dosed.
4. Divide the number of ml by 60 seconds to determine the actual volume per second.

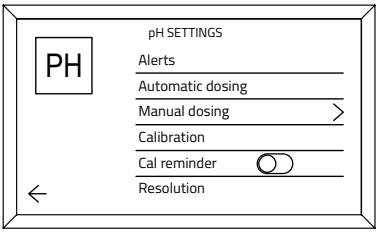
Example:

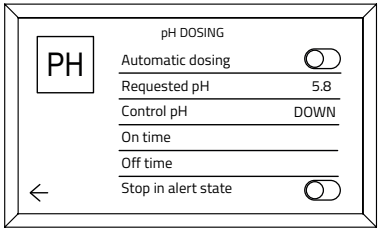
If the pump doses 60 ml per minute, this means the pump is dosing 1 ml per second instead of the standard 2 ml per second. In this case, the pump needs to run longer to reach the desired volume.

⚠ **Important:**

Regularly check that the tubing is not becoming clogged or pinched. This can hinder the flow and result in less liquid being dosed over time. Replace the tubing if it starts to pinch or shows signs of wear.

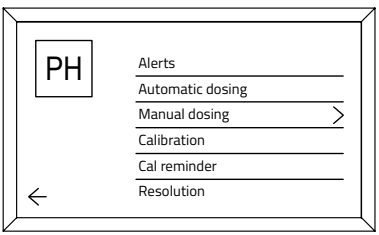
Automatic pH Dosing

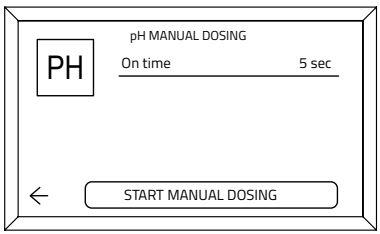




1. Go to the pH section in the main menu.
2. Tap Automatic Dosing.
3. Use the On/Off button to enable or disable automatic dosing. The status will be displayed on the dashboard.
4. Tap the value under Requested pH to open the keyboard and enter the desired pH value.
5. Under Control pH, select whether the pH should be raised or lowered:
   - Use UP to raise the pH (for decreasing pH levels).
   - Use DOWN to lower the pH (for increasing pH levels).
6. On time: Set how long the pH pump should dose. Tap the value to open the keyboard and set the desired dosing time (volume per second). The maximum dosing time is 900 seconds per dose.
7. Off time: Set the pause between doses to prevent the unit from dosing again too quickly. The maximum off time is 60 minutes, allowing the solution to circulate and stabilize the pH value.
8. Stop in Alarm state: If an alarm is active, the user can choose to stop dosing when the alarm is triggered.

Manual pH Dosing

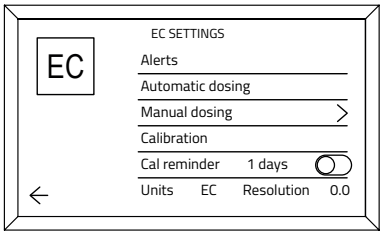


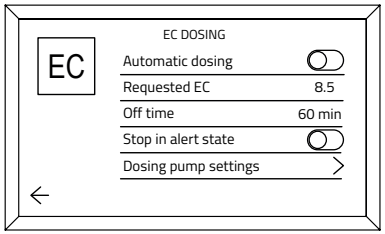


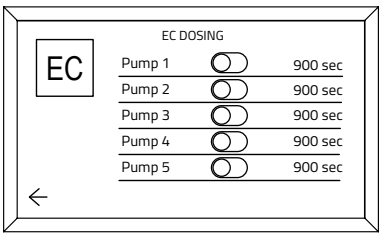
Manual dosing for pH and EC is also possible. For the desired pump, set the dosing time/volume and tap Start Manual Dosing. The controller will begin manual dosing. If you need to stop dosing before completion, tap Stop Manual Dosing.

Automatic EC Dosing

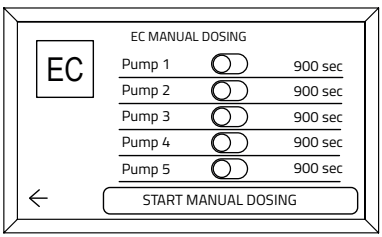
1. Go to the EC section in the main menu.
2. Tap Automatic Dosing.
3. Use the On/Off button to enable or disable automatic dosing. The status will be displayed on the dashboard.
4. Tap the value under Requested EC to open the keyboard and enter the desired EC value.
5. Off time: Set the pause between doses to prevent the unit from dosing again too quickly. The maximum off time is 60 minutes, allowing the solution to circulate and stabilize the value.
6. Stop in Alarm state: If an alarm is active, the user can choose to stop dosing when the alarm is triggered.
7. Dosing Pump Settings: Turn the pump on or off and set the dosing time for each pump. Tap the value to open the keyboard and enter the desired dosing time (volume per second). The maximum dosing time is 900 seconds per dose.







Manual EC Dosing

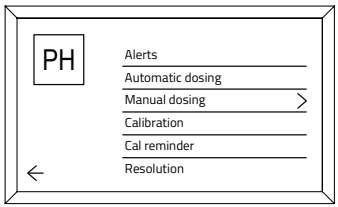


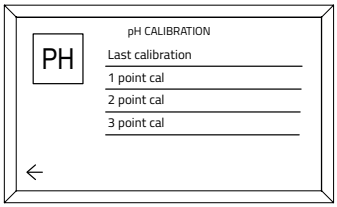
Manual dosing for EC is also possible. Turn the desired pump on or off and set the dosing time/volume. Then, tap Start Manual Dosing to begin manual dosing.

If you need to stop dosing before completion, tap Stop Manual Dosing.

5.6 CALIBRATION

Important:
Make sure automatic dosing is disabled before starting calibration.





pH Calibration

1. Go to pH in the main menu and select Calibration.
2. Choose a 1-point, 2-point, or 3-point calibration. The required calibration solutions will be displayed.
3. Follow the on-screen instructions to complete the calibration process.

EC Calibration

1. Go to EC in the main menu and select Calibration.
2. Choose the 1-point calibration based on the specified calibration solution. The required solutions will be displayed.
3. Follow the on-screen instructions to complete the calibration process.

Calibration Considerations

- Always ensure that the calibration solution is fresh and at 25°C during calibration. Use fresh solution for each calibration.
- Ensure that the electrodes are clean.
- There should be no air bubbles in the calibration solution.
- If error messages persist despite these precautions, it may indicate an issue with the electrode.

Calibration Reminder

The C800 Pro Controller Inline offers a calibration reminder feature to ensure calibrations are not forgotten and are performed on time. These reminders can be easily set by toggling the On/Off button and selecting the desired number of days after which a reminder should be sent.

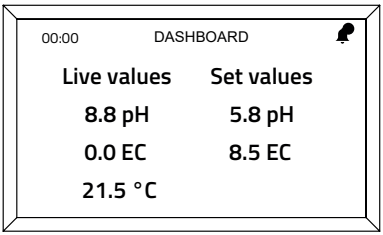
5.7 RESOLUTION AND UNITS

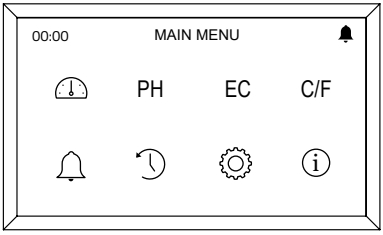
The resolution for pH and EC can be adjusted from the main menu. To do so, tap the value next to Resolution and select either 1 decimal or 2 decimals.
Note: Be sure to tap the value to change it.

For EC, you can also switch the units between EC, PPM, or TDS.

Temperature can be measured in either Celsius or Fahrenheit. To switch, go to the Temperature section in the main menu and tap the value next to Type to select the desired unit.

5.8 ALERTS

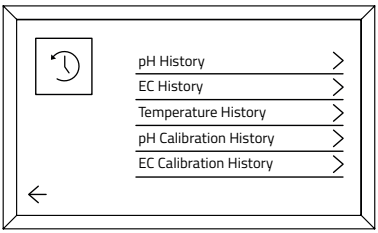


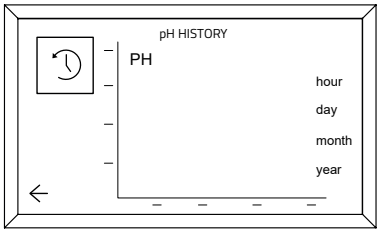


When an alarm or calibration reminder is triggered, the alert will appear on the dashboard and will also be stored under Alerts in the main menu. Each parameter's alert history can be reviewed individually, and all alert history can be cleared if desired.

Important:
Alarms are not just warnings that values have shifted away from the required value. Be careful not to set alarm values which are too close to the required values, as they may result in the C800 Controller going into alarm because of small variations in measured values.

5.9 HISTORY



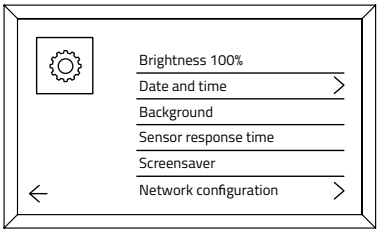


On the History page, you can view graphs displaying pH, conductivity, and temperature values for up to 12 months. Additionally, this page provides an overview of successful pH and EC calibrations.

Effect of Alarm Triggers on the History Page
Regardless of whether alarms are enabled or disabled, adjusting the alarm triggers will zoom in or out on the historical graph. This allows smaller fluctuations in values to be more visible.

To ensure the full range is shown in both historical and live graphs, it's important to set alarm triggers to the minimum and maximum values. Otherwise, parts of the range may be hidden and not visible.

5.10 SETTINGS



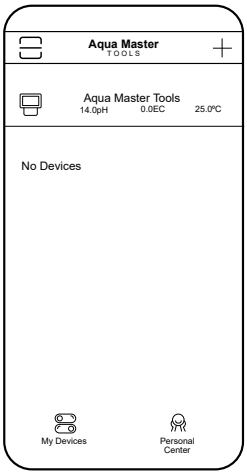
In the Settings menu, you can adjust various screen options, including brightness and background themes. You can also set the date and time. If the controller is connected to the internet via the app, the date and time will be automatically updated.

Sensor Response Time
Adjust the sensor response time to prevent dosing during short fluctuations. If set to 0 seconds, dosing will occur once the value exceeds the set threshold. If set to, for example, 15 seconds, dosing will only trigger after the value stays 15 seconds below the set value. The minimum setting time is 0 seconds, the maximum time is 60 seconds.

Screensaver
Set the time duration (in minutes) for the screensaver to activate. The range is from 16 to 120 minutes. To wake up the controller from screensaver mode, simply tap the screen. The screensaver cannot be disabled due to screen protection.

Network Configuration
Follow the steps in the Network Configuration mode to connect the controller to the app via your Wi-Fi router.

6. Smartphone App



By downloading the **Aqua Master Tools** app from the App Store or Google Play for Android or iOS, you can connect the controller to the app via Wi-Fi.

The app offers all the features available on the controller, with added functionality such as:

- Save dosing schedules and upload them later.
- Receive alarm notifications on your smartphone.
- Link as many devices as needed.
- Rename devices.
- Full control anywhere, anytime

6.1 INSTALL THE APP

Connecting the app to the controller is easy. Follow these steps:

1. Download the Aqua Master Tools app, create an account, and log in.
2. Ensure your smartphone is connected to the Wi-Fi network that will be used for the controller. Keep the controller close to the router or use a signal booster if needed.
3. Press and hold the black button on the controller for 10 seconds. The indicator light on the controller will then start blinking red, which means it is ready to make a connection.
4. Make sure you're logged in to the app. Tap the plus icon in the top right corner of the home screen to add a new device.
5. Select Bluetooth Configuration.
6. Ensure your Wi-Fi password is compatible with your router, then tap Next.
7. Check if the red indicator light is blinking, and then tap Step Completed. The controller will now connect to the Aqua Master Tools app.

Indicator Light Statuses:

The indicator light on the controller shows the current Wi-Fi connection status. The three possible states are:

1. Red (Constant): The controller is not connected to a Wi-Fi network.
2. Red (Blinking): The controller is ready to connect to a Wi-Fi network. It will blink red when it's in pairing mode and waiting for a connection.
3. Green: The controller is successfully connected to the Wi-Fi network.

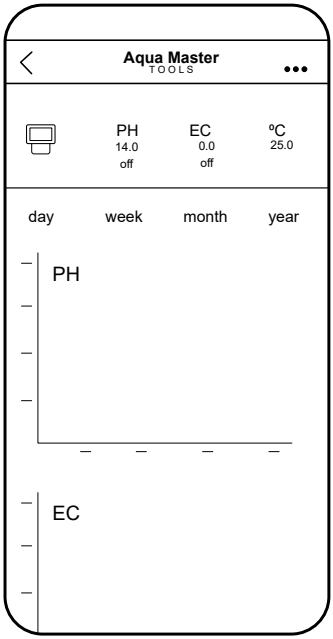
Soft tap Connection (if Wi-Fi/Bluetooth Connection Fails)

If the Wi-Fi or Bluetooth connection does not work, you can use the soft connection method:

1. Connect to the Wi-Fi signal **XP Agent**.
2. Enter the password: **123456789**.
3. Once connected, you can proceed with the setup as described in the previous steps.

6.2 USE OF THE APP

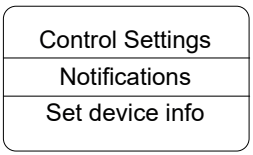
To view graphs of your system's parameters, tap the Controller C800 icon on the app's home screen. This will take you to the graph view where you can see live data for pH, EC, temperature, and more.



6.3 CONTROL THE SETTINGS

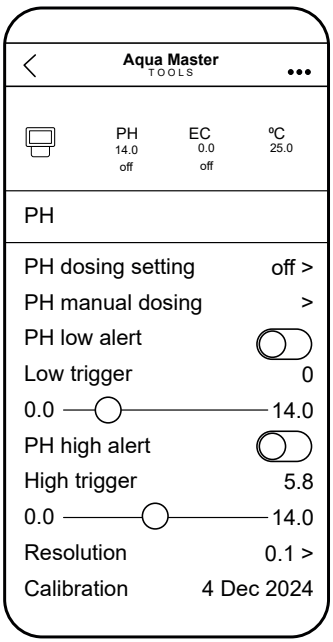
•••

To modify settings directly from your smartphone, tap the three-dot icon located in the top-right corner of the app screen.



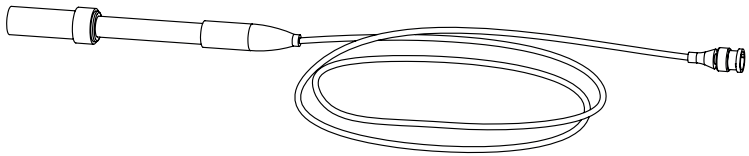
A pop-up menu will appear. Select Control Settings to adjust parameters and variables remotely, such as pH, EC, temperature, and dosing settings.

(Control Settings)



7. Care and Maintenance

pH probes have a limited lifespan.
Over time, pH probes naturally degrade with regular use, and they will eventually need to be replaced. The duration of a pH probe's life is influenced by the environment in which it is used and how well it is cared for. To ensure your Aquamastertools® pH Probe lasts as long as possible, follow the recommended care guidelines below.



Proper Handling and Care
Since pH probes contain glass, they are fragile and require careful handling. With proper care, however, your probe can provide reliable service for years.

- Avoid letting the pH probe tip dry out.
- Do not bend the probe, as this will damage the internal glass components.
- Avoid knocking the probe, which can break both the internal glass tube and the external glass bulb.
- Do not expose a cold pH probe to a hot liquid, or a hot probe to cold liquid. Sudden temperature changes can cause the glass to crack.
- Do not immerse the probe in oils, proteins, or suspended solids that can leave a coating on the glass bulb.
- Never kink or sharply bend the probe lead.
- Do not attempt to extend the lead on the pH probe.
- Avoid wetting the BNC connector (the end of the lead).

Removing and Storing the pH Probe

1. Remove the storage cap: Grip the top of the cap and twist it clockwise to loosen. Gently slide the cap off the probe, ensuring you do not remove the base of the cap completely from the top.
2. Store the cap in a safe location for later use.

Storing the pH Probe
The pH probe tip must always be kept moist when not in use. To store your probe correctly:

1. Add enough Aquamastertools® pH Probe KCl Storage Solution to the storage cap to cover the probe tip.
2. Replace the storage cap and store it in a safe, secure place.

⚠ **Important:**
Do not use Reverse Osmosis (RO), distilled, or de-ionized water to store the probe, as it will alter the probe's glass chemistry and may cause permanent damage.

If your pH probe has accidentally dried out:

- Rehydrate the probe by soaking it in KCl storage solution for 24 hours (never use RO, distilled, or de-ionized water).
- After rehydrating, calibrate the probe. If calibration fails, the probe may be irreparably damaged.

Cleaning the pH Probe Tip

To ensure accurate readings, it's important to rinse the pH probe tip with water after each use and clean it before calibration. Follow these steps:

1. Remove the storage cap: Twist the cap to loosen and gently remove it.
2. Rinse the pH probe tip under fresh tap water (never use RO, distilled, or de-ionized water).
3. Prepare a cleaning solution: Fill a small container with clean tap water and add a small amount of Aquamastertools® Cleaner D or a mild dishwashing detergent.
4. Gently swirl the probe tip in the solution, being careful not to knock the probe against the sides of the container.
5. If the probe tip has heavy contamination, use a soft toothbrush with a few drops of Aquamastertools® Cleaner D or mild detergent to carefully scrub the glassware.
6. Rinse thoroughly under fresh tap water to remove all detergent residue.

Calibrating the pH Probe After Cleaning

Once the probe has been cleaned, calibrate it to ensure it gives accurate readings. After calibration, store the pH probe in the storage cap with enough KCl Storage Solution to cover the probe tip.

Rehydrating the pH Probe

If the probe tip has not been stored in KCl solution or has dried out, you can rehydrate it to restore optimal performance:

1. Loosen and remove the storage cap.
2. Place the probe upright in a plastic container.
3. Clean the probe tip using the steps above.
4. Add Aquamastertools® pH Probe KCl Storage Solution to submerge the probe tip.
5. Allow the probe to soak for at least 24 hours. After rehydrating, calibrate the probe to ensure accurate results.

By following these care and maintenance practices, you can extend the lifespan and accuracy of your Aquamastertools® pH Probe, ensuring reliable performance for your measurement needs.

8. Specifications

Range	pH: 0.00 ~ 14.00 pH EC: 0.00 ~ 20.00 mS/cm TDS: 0.00 ~ 14.00 PPT PPM: 0 ~ 14000 PPM Temp.: 0°C ~ 50°C (32°F ~ 122°F)
Resolution	pH: 0.01 or 0.1 pH EC: 0.01 or 0.1 mS/cm TDS: 0.01 or 0.1PPT PPM: 7 PPM Temp.: 0.1°C (0.2°F)
Accuracy	pH: ±0.1 pH EC: ±2% F.S. TDS: ±2% F.S./ PPM: ±2% F.S. Temp.: ±0.5°C
PPM scale	700 PPM
Calibration	pH: 1, 2 or 3 point cal 4.0 - 7.0- 10.0 pH EC: 1 point auto cal 1.4 - 3.0 - 12.88 EC
Features	Low high, pH, EC and temp alarms. Stop dosing in alarm state safe dosing settings
Power supply	AC85~260V, 50~60Hz, with standard UK/EU/AU/US plugs
Signal	Wifi: 2.4G
Calibration indicator	Adjustable calibration indicators
Waterproof	IP63 (electrodes are IP67 waterproof)
Dosing	On-time dosing: settable from 1 to 900 second Off-time: 0 to 60 minutes
Maximum pressure inline electrode	2 Bar
System requirements	Android (8.0 or later) or iOS (12 or later)
Threaded inline electrode	Screw thread 3/4
Dimensions	194 x 210 x 55 mm
Weight	656 grams

9. Warnings and issues

1. **Electrical Safety:**
   - Always ensure the device is unplugged before performing any maintenance or installation.
   - Ensure that the power supply voltage matches the specifications of the device (typically 110-240V).
   - Do not operate the device with a damaged power cord. If the power cord is damaged, replace it immediately.
2. **Waterproofing:**
   - The pH and EC probes are waterproof and can be submerged in water or other solutions during use.
   - Caution: The connectors of the probes are not waterproof. Always ensure that the connectors remain dry and are not exposed to water or other liquids to avoid damage to the electrical connections.
3. **Chemical Exposure:**
   - Keep the pH and EC probes away from aggressive chemicals or harsh solvents that may damage the sensors.
   - Do not use the controller in environments with extreme chemical concentrations that exceed the probe's specifications.
4. **Calibration:**
   - Regularly calibrate the pH and EC probes using appropriate standard solutions to maintain accurate readings.
   - Failure to calibrate properly may result in incorrect readings and affect the performance of the system.

Potential Problems and Troubleshooting

1. **Incorrect Readings:**
   - pH Readings: If the pH readings seem inaccurate, check if the probe is properly calibrated and if the calibration solution is fresh.
   - EC Readings: If EC readings are fluctuating or incorrect, check the calibration and ensure that the probe is clean and free from debris.
2. **Probe Failure:**
   - pH Probe: If the pH probe is not responding or the readings are very erratic, it may be worn out or the electrolyte solution inside the probe may be depleted.
   - EC Probe: EC probes can wear out over time or become clogged with debris. Regular cleaning and proper maintenance are crucial again.

10. Warranty

Standard Terms and Conditions of the C800 Pro Controller Inline Limited Product Warranty

How Long Is The Coverage?

1. The C800 Pro Controller Inline is covered by a 2-year warranty starting from the date of purchase by the first purchaser. Coverage ends if the product is sold or otherwise transferred to another party.
2. The pH electrode has a 6-month warranty starting from the date of purchase. The warranty does not cover broken glass unless reported within 24 hours of purchase.
3. Water damage to the controller is not covered under the warranty.

How Do You Obtain Service?

1. Products must be returned to the point of purchase.
2. Any parts that are replaced will become the property of Aquamastertools®.

What Is Covered?

With proof of purchase via a store-issued receipt, we will repair or replace your product if it is found to be defective due to faulty materials or workmanship existing at the time of purchase. If any part is no longer available or is out of production, Aquamastertools® will replace it with a functionally equivalent part.

What Is Not Covered?

Aquamastertools® will not be responsible for repair or replacement costs arising from:

1. Normal wear and tear.
2. Accidental damage, faults caused by negligent use, misuse, neglect, careless operation or handling of the product not in accordance with the Aquamastertools® instruction manuals.
3. Use of parts not assembled or installed in accordance with Aquamastertools® instructions.
4. Use of parts or accessories not produced or recommended by Aquamastertools®.
5. External causes such as transit damage or weather conditions.
6. Repairs or alterations performed by anyone other than Aquamastertools® or its authorized agents.
7. Defaced or missing serial numbers.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHETHER ORAL OR WRITTEN. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW (INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY) ARE LIMITED IN DURATION TO THE PERIOD OF THIS LIMITED WARRANTY.

Limitation of Liability

Under no circumstances shall Aquamastertools® be liable for any claims, losses, costs, or damages of any kind (including any consequential loss) resulting from the use of, or the inability to use, these instructions.

11. Contact and Support

For technical support or more information about Aqua Master Tools controllers, please contact us via:

- Website: www.aquamastertools.com
- Email: support@aquamastertools.com
- Phone: +31 357 130 064

This manual provides all the necessary information for the installation, configuration, operation, and maintenance of Aqua Master Tools controllers. Please follow the instructions carefully to ensure optimal performance of your system.

A great deal of knowledge has been accumulated

Aqua Master Tools was founded in 2018 in The Netherlands with the vision of providing reliable and practical measuring instruments at an affordable price to customers worldwide. Today, Aqua Master Tools offers a diverse range of products suitable for various industries.

We understand the importance of convenient, accurate, and high-quality meters. Aqua Master Tools' wide range of products is customized to meet the needs of our users.

- Many years of experience
- Wide range of global resellers
- Continuous focus on product innovations

Satisfaction guaranteed

- Easily replaceable electrodes
- Built to last products
- Fully calibrated meters
- Unprecedented quality

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