

Zhangjiagang One Chip Biotechnology AEB2 Water Test Automated User Guide

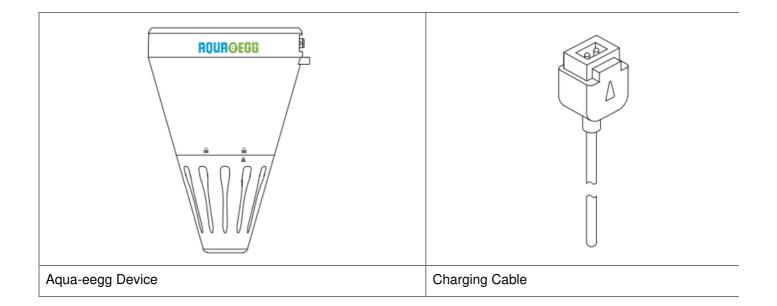
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AQUAGEGG

Water Test Automated User Guide



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Get the App

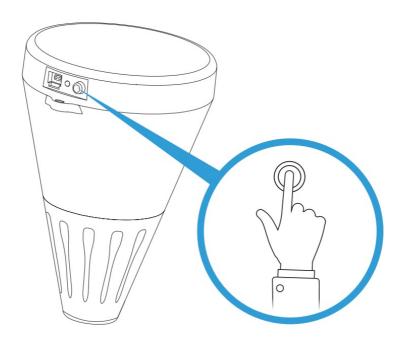
Download the AqualOT App for your smartphone by scanning this QR code or searching AqualOT in the App store.



Turn on your Aqua-egg

Take the Aqua-egg out of the box and press the switch button as shown in the figure. After the button is pressed, the indicator light will flash five times in green.

NOTE: The Aqua-egg will perform a self-check after it is started, and it takes the 90s before it can communicate properly with the mobile phone Bluetooth.

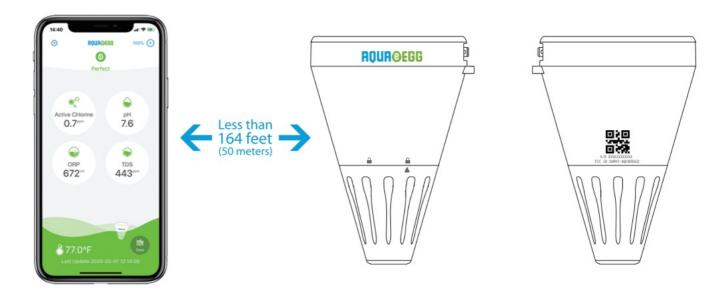


Pair up Aqua-egg with your phone

- a. For first-time use, you need to pair Aqua-egg to your phone. Make sure your phone is within 164 feet (50 meters) from the Aqua-egg, enable Bluetooth, allow the App to obtain positioning permissions, and synchronize the local time for regular tests.
- b. Start the AqualOT App on the phone. Scan the QR code on the Aqua-egg and add the device for the first time. The App will automatically search for and connect to the Aqua-egg. If the connection is successful, the message "Connected successfully" will be displayed on the screen. That means the pair-up process succeeds. Otherwise, restart the App and repeat the steps above to connect.
- c. After the connection is successful, Aqua-egg will automatically synchronize with the mobile phone time. It will test every exact hour from 9:00 am and 5:00 pm by default. To make the test more stable, manual testing is not

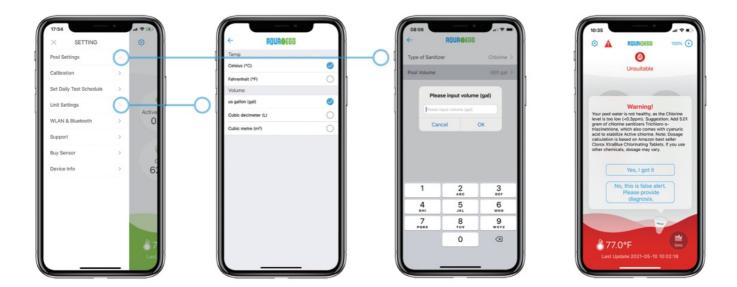
possible at other times.

NOTE: After successful pair up, you could choose one of the two communication modes: Bluetooth or WLAN. If the Aqua-egg is set to Bluetooth communication mode, please make sure to connect it by App after the Aqua-egg is restarted, then the test can be conducted normally.



Enter Pool Volume to Get Chemical Recommendations

You need to enter the amount of water in your pool in our app settings interface so that the App can provide recommendations for chemical dosage.



Calibrate Aqua-eegg Sensor

When using it for the first time or after a long period of inactivity, please calibrate the Aqua-egg sensor. Before running the calibration, please follow the previous steps to turn on the Aqua-egg sensor, release it to the water, and set up the connection with App. Then click the "calibration" button on the App. The calibration will automatically start. The calibration process will take about twelve minutes to finish. Please refer to the figure below.



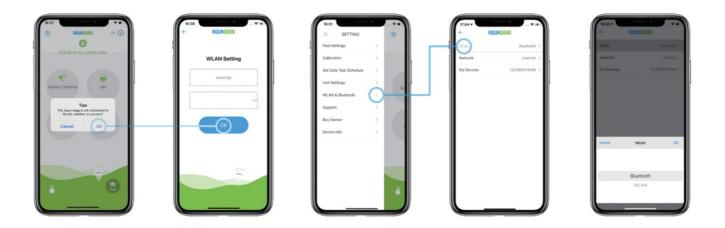
Aqua-eegg Communication Modes

- a. There are two communication modes for the Aqua-egg. Bluetooth communication and WLAN communication. The App will pop up a prompt box to select WLAN or not when the device is used for the first time. If WLAN is chosen, the Aqua-egg will be set to WLAN communication mode. Otherwise, the Aqua-egg will stay with the default setting of Bluetooth communication mode. Users can switch the communication mode in the App setting interface.
- b. In both communication modes, the test date is reported on the App. However in Bluetooth mode, your cell phone has to be within 164 feet/50-meter range from the Aqua-egg in order to get the test data; In WLAN mode, the test data can be obtained remotely as long as the Auqa-egg is within the coverage of the WLAN signal, and the mobile

phone is connected to the Internet via wireless network or cellular network. Also in Bluetooth mode, the Aqua-egg can be configured through the App; while in WLAN mode, the Aqua-egg setting cannot be configured, only test data is reported.

NOTE:

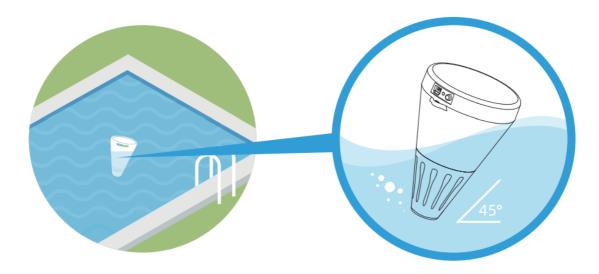
- 1. If the Aqua-egg is set to Bluetooth communication mode after it is restarted, please make sure that it is connected with the App successfully before the test can be conducted (In the WLAN communication mode, the test can be conducted normally without reconnecting through App)
- 2. If the Aqua-EEG is set to WLAN mode, only supports the use of the 2.4G frequency band. Please make sure that the mobile phone is currently connected to the WLAN network in the 2.4G frequency band, otherwise, Aquaegg cannot be connected.



Put the Aqua-egg into the water

Before putting the Aqua-egg into the water, you need to confirm that the device is turned on. To avoid bubbles accumulated at the bottom, tilt the Aqua-egg at 45° as shown in the picture), slowly put it into

the pool, and shake the Aqua-egg gently in the water several times to release the bubbles.

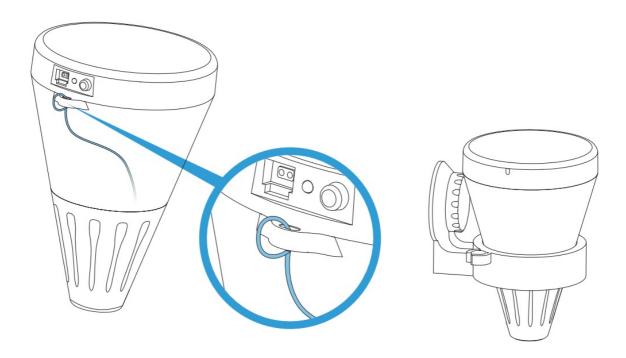


Tie a fixed rope (optional)

- a. Get the lashing rope through the hole shown in the Aqua-egg. Please make sure it is fastened;
- b. Tie the other end of the rope to a fixed object by the pool to prevent the Aqua-egg from floating away. When needed, the Aqua-egg can be pulled back by the rope.

An optional holding fixture can be purchased on www.Aquaiot.tech to attach Aqua-egg to the pool wall to prevent it from drifting around.

NOTE: The holding fixture is not suitable for the pool wall is uneven.



You're Done!

Congratulations! Your Aqua-egg has been set up and ready to go.

Scroll down the screen the App displays the water quality data of the hourly automatic tests between 9: 00 am and 5: 00 pm by default. This time period can be Configured in the App.



To query the historical data, click the Data icon at the bottom right corner of the screen.



Water Quality Guide

For water quality of swimming pool

The water quality situation	AC (Active Chlorine)	pH (Acidity and alkal inity)	ORP (Oxidation- Red uction Potential)	TDS (Total dissolved solids)
Perfect	0.3c AC< 1ppm	7.2 c; pH cz 7.8	550mV	0 c; TDS c: 2000ppnn
Acceptable	1 < AC<2	,1 7.0 cpH < 7.2 7.8 < pH c: 8.0	500 ,-;, ORP< 550m V	2000 < TDS cl 2500ppm
Unsuitable	<0.3, or >2.0	< 7.0, or >8.0	< 500mV	>2500ppm

NOTE: This data table is partially based on some publications about water quality. It only serves as a reference. Please consult your pool technician for your specific types of the pool before action.

AQUAIOT INC. is not responsible for how you use the measured data.

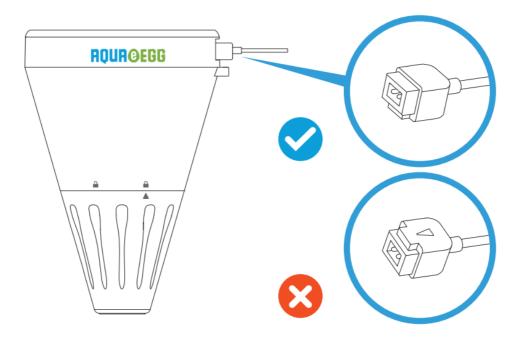
Light state definition

NO.	Different States	Light Modes
1	Turn on the power switch	The green light blinks on and off every 1s fo r 5 times
2	Aqua-eegg is normal but WLAN is not connected	The red light is on for 3s if it is configured in WLAN mode; There is no light on in Bluetooth mode
3	low power	Red and green flash alternately, on for 1s, o ff for 9s
4	Over-the-Air Technology (OTA) upgrade	The green light is always on until the OTA upgrade is completed
5	Charging with charging cable	The red light is always on during charging, and the green light turns on when fully char ged

Charge your Aqua-egg

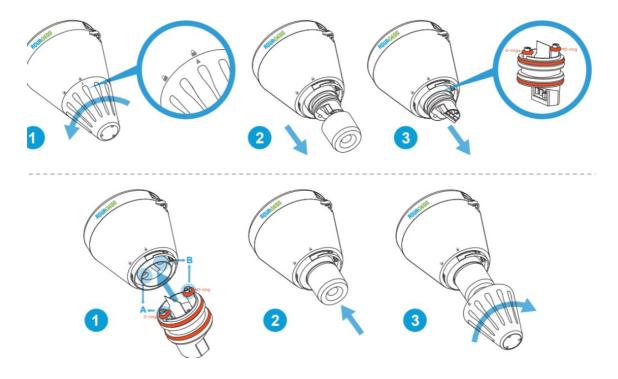
Charge Aqua-egg by connecting the charging cable with a USB power port. Note that the arrow on the charging cable should face down (as shown in the figure below; the indicator light stays red during charging, and the light is turned to green when fully charged. Aqua-egg can be charged in either ON or OFF state.)

NOTE: Aqua-egg has a solar charger onboard that can harness solar energy automatically. So when used in the sun, there is no need to frequently charge the Aqua-egg manually.



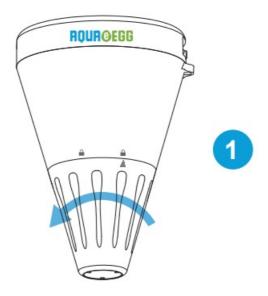
Replace Sensor

- a. Rotate the lower part of the Aqua-egg counterclockwise remove it, and pull out the sensor in the direction of the arrow as shown in the figure.
- b. Take out the new sensor from the box and make sure that the O-ring is in the correct position, as shown in the figure below. If there is no O-ring, please do not use it.
- c. Insert the sensor module into Aqua-egg. Please note that the A and B ports of the sensor match to the Aqua-egg body one by one, otherwise it cannot be installed. Then turn the lower housing clockwise until it is tightened. (As shown in the third picture on the second row.)



Quick Tips:

1. Please do NOT put Aqua-egg close to the inlet/outlet of the pool or other electronics such as the pump, heater, or a cleaning robot. Find a calm area for Aqua-egg to avoid water turbulence to interfering with testing.



2. Aqua-eegg is a monitor, not a test meter, as it tests hourly automatically.



3. The sensor cover and the charging port plug MUST be in place for an accurate reading.



- 4. When your phone is disconnected with Aqua-egg, it still tests water according to the default time point. Once the connection is restored, Aqua-eegg will send the data to the phone, which can be viewed on AqualOT's "Data" page.
- 5. When App gives an alarm and reminds you that the sensor needs to be cleaned, you can refer to the following method. As shown on the right, please open the sensor mesh cover from the bottom, clean the surface with a cotton swab dipped in water.
- 6. When the Aqua-egg's power bar on the APP screen is low, you need to recharge the Aqua-egg device. Fetch the Aqua-egg from the water, and use a paper towel to wipe the surface and let it dry.
- 7. When Aqua-egg is used for the first time or used after being idle for a long time, Aqua-egg needs to be calibrated at the App client, which takes about 12 minutes. Please refer to page 7 of the calibration procedure.

Product Specification

Product Specification				
Wireless communication	Bluetooth4.2 (Bluetooth Low Energy), WLAN (2.4G)			
Wireless range	164 feet/50 meters (outdoor)			
Dimensions(HxD)	ck0.36inch, Height 0.53inch			
Test Environment	Swimming pool and HotTubs(mainly for the pool using chlorine/bromine chemicals. Please note that salt pool may reduce the lifetime of the sensor due to severe erosion)			
Safe Environment	Sunshade, room temperature, keep ventilation, dry.			

Characteristics	Range	Precision
Active Chlorine/Bromine(ppm)	0-3.5/0-7	±0.3 or 10%
рН	6-9	±0.3
TDS(ppm)	0-3000	±10%
ORP(mV)	0-1000	±10%
T(°F)	52-122	2

Important Safety and Compliance Information

To reduce the risk of injury and damage, keep these safety precautions in mind when setting up, using, and maintaining AqualOT.

- Read all operating and safety instructions before operating Aqua-egg.
- Retain this user's manual for future reference.
- Do NOT use this device to test hot water. The operating temperature range is 50~113 deg.F.
- Do NOT drop this product from a high place. If the product is found cracked, it cannot be placed in water.
- Although Aqua-egg is a fun device, it should not be used as a toy. Do NOT throw the product into the water.
- Do NOT place Aqua-egg into the water without a sensor.
- Wipe the charging port on the Aqua-egg to dry before charging.
- To ensure the test accuracy, the sensor needs to be replaced every six months
- (the specific time depends on the operational environment).
- Do NOT step on, drop, or knock on this product.

- Do NOT disassemble or modify this product and the sensor.
- Do NOT perform operations not described in this manual.
- DO NOT use Aqua-egg to test liquids other than pool water, as liquids like coffee, beer, and beverage would contaminate the sensor.
- To avoid the possibility of accidental ingestion, keep the product away from young children.
- Please do not use Aqua-egg to test liquids other than pool water, as liquids like coffee, beer, and beverage would contaminate the sensor.

This product is an engineering design of radio station equipment with a small radio wave data communication system. Aqua-egg operates in the 2.4GHz band. It may affect other devices using the same frequency for communication. Before using this product, please confirm whether you have used other radio stations nearby. In the event of radio interference between this product and "other radio stations", please change the place of use or stop using other devices. For purchase, please visit the company website: www.acquaint.tech, Under normal use according to the user's manual, if there is a failure during the warranty period, please send an email to aquabotinc@gmail.com, and the company will reply to you regarding the return process. We do not provide sensor modules for free that need to be replaced due to normal aging. Please purchase them at the dealer's website or the company's website. Regardless of whether it is during the warranty period, AqualOT is not responsible for any damage or injury caused by using the product. AqualOT only bears the compensation up to the product payment limit.

FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. To maintain compliance with FCC's RF exposure guidelines, This equipment should be installed and operated with a minimum 20cm distance between the radiator on your body Use only the supplied antenna. Regardless of whether it is during the warranty period, Aqua-egg is not responsible for any damage or injury caused by using the product. Aqua-egg only bears the compensation up to the product payment limit.

Documents / Resources



Zhangjiagang One Chip Biotechnology AEB2 Water Test Automated [pdf] User Guide AEB2, 2AWOS-AEB2, 2AWOSAEB2, AEB2 Water Test Automated, Water Test Automated

