BPA FREE

AQUAVOLTA®

H_2-TURBO 2.0

Hydrogen-Booster
6th Generation

MANUAL

BY Karl Heinz Asenbaum

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2 - What is AquaVolta®?

- *The brand name Aquavolta ® derives from the latin term for water(aqua) and the name of the inventor of the battery, Alessandro Volta. It stands for electro activated water.*
- *In Germany one originally spoke of electrolyte-water, afterwards of "activated water". In English it is often described as "reduced", "ionized" water or "Hydrogen Rich Water".*
- *The characteristic of AquaVolta® is that a negative electrical tension with a measurement electrode shows a so-called negative redox potential or ORP: Oxidative Reduction Potential.*
- *The lower the redox potential, the higher the willingness water has of giving off electrons. Per 0,018 Volt (18 Millivolt) lower redox potential does the willingness double. AquaVolta® has about a 400 to 800 Millivolt lower redox potential than tap water or mineral water from a bottle.*
- *Because of its high willingness to give off electrons, AquaVolta® is also described as antioxidant water. It is not only used by doctors for therapy, it has also established itself because of its good taste as a modern day to day drink.*
- *Responsible for the antioxidant power of AquaVolta® according to the current scientific view* ***is the content of dissolved hydrogen, or dH2.***
  The AquaVolta ® H2-Turbo ® was developed to enhance this. This product mirrors the standard of technology in the year 2023.

3 – TURBO: The 6th generation of Hydrogen-Boosters

- Hydrogen gas, H_2 has been recognized by medical research as the "gas of life" only in the 21st century. When drunk, dissolved in water, this can produce antioxidant, anti-inflammatory and anti-apoptotic effects. In recent years, a mitohormetic effect has also come into focus, with benefits similar to athletic training.

- When this began to be understood, an industry first developed that pressed hydrogen-rich water at high pressure into aluminum cans or bags, where the H_2 content could be preserved for several months. This is not only very expensive, but also causes major waste problems.

- Bubble tablets were also developed that could produce hydrogen-rich water. However, they are relatively expensive in the long run and have an acidic aftertaste.

- European consumers in particular therefore gave preference to a do-it-yourself solution, for which Karl Heinz Asenbaum coined the term "hydrogen booster" in his book “Electro-activated Water”, published in 7 languages.

- The basis of the do-it-yourself solutions is always the electrolysis of water. Thus, stationary water ionizers work with diaphragm electrolysis, while mobile electrolysis devices work with a so-called PEM cell, in which the electrolysis gases H_2 and O_2 are cleanly separated and only the hydrogen accumulates in the water. In addition, boosters such as the Aquavolta® H_2-Turbo use pressure systems to dissolve as much H_2 as possible in the water. In the 6th booster generation, it has now been possible to keep the gas bubbles so small that the efficiency of the booster has been significantly increased.

4 – Always fresh hydrogen (almost) free water selection

You can use your booster anytime and anywhere thanks to its long-lasting battery.

We designed the **AquaVolta® H2 - Turbo Hydrogen Booster** so you don't have to rely on a single type of water. If you don't trust the tap water and you are on the go, **you can add filtered tap water and even water from a reverse osmosis (RO) system to your booster.**

You can also fill the BPE-free (SGS-Analysis available) Tritan container with your favorite mineral water. It is even possible to unscrew the Tritan container and screw on a mineral water bottle with 30mm thread (plastic bottles only!) instead. An adapter for 28mm plastic bottles is also included.

Important: The water must not contain any carbonic acid/fizz. **Otherwise, the gas pressure will exceed the capacity of the overpressure system and the booster could be damaged or even burst.**

Any drinking water

RO-Water Suitable!

Suitable For bottles!

Bottle cap for 30mm

Adapter for 28mm

Always fill plastic bottles to the brim

Since bottles do not have pressure equalization holes, this method is always 2nd choice.

Maximum production time: 5 Min. for 240 ml Wasser, so 10 min. for 0,5 Liter.

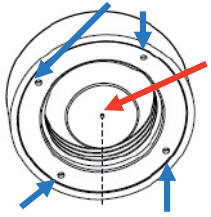
⚠ Please ONLY use plastic bottles since these are flexible.

⚠ **Glass bottles** cannot be used for fizzy water, even if indicated that they withstand high pressure.

5 – Device description / scope of delivery

Pressure equalization holes in the screw cap. Do not block!

Pressure vents



Safety valve:

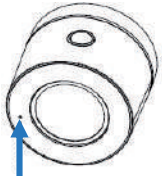
Please perforate every 1-3 months with a sharp point.

This releases the safety valve should it get blocked with time.

Screw-in production bottle 240 ml made of Tritan

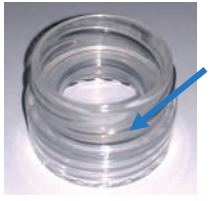
4 x Extra-production bottle 240 ml made of Tritan

Exchange for defekt or clouded bottles



H_2 - Generator

Condense water perforation in the generator. Do not block. O_2 gas and water droplets can be excreted here.



Bottle screw thread for 30mm or with an adapter for 28mm

Replacement washers for the lid (above)

Replacement washers for the socket (below)

USB supply with USB-C connection

6 - Preparing for use

1. The device is built from 3 components. The H_2 generator, the production vessel and the lid.
2. Before commissioning, unscrew the production vessel, remove the orange silicone plug and keep it. On a new device, there may still be residual water under the plug for membrane protection. Please pour this away and rinse with clean water.
3. If you do not use the device for more than one week, fill water into the electrolytic cell to a height of max. 1 cm and close it with the silicone plug.
4. Before first use, fill the production vessel with water for at least 30 minutes to soak the electrolyte membrane. Then pour the water away.
5. The membrane in the generator should be constantly moist.
6. Filled water must never be above 55°C.
7. Never place the device under water.

Screw cap

Production vessel

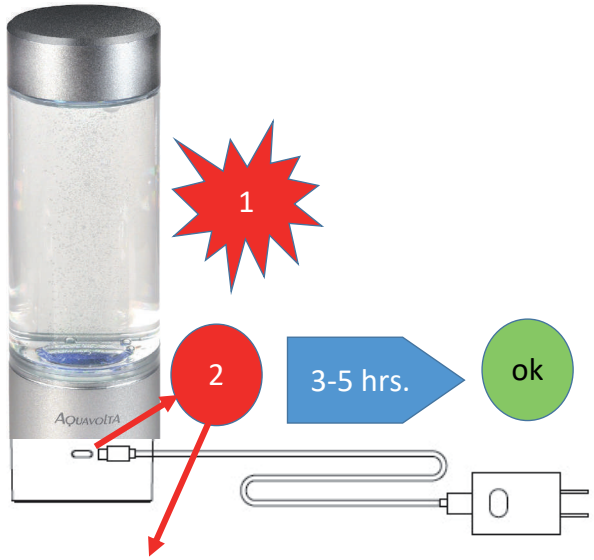
H_2 Generator

7 - General instructions for use

- Only operate the device if you have read and understood the operating instructions.
- Before you switch the unit on, the water tank must be filled with water. Otherwise, the electrolysis cell will be damaged and the warranty does not cover this.
- Do not use water over 55° C.
- Use the power supply with only 220 Volt.
- Ensure that children do not have access to the device.
- Never put the device under water. A damp cloth is sufficient for cleaning. Do not use chemical cleaning agents.
- Never drop the device.
- Preferably use cold water (under 30° C)
- Do not expose the device to direct sunlight or temperatures below 0 or above 50° C.
- Do not place the device in damp or dirty rooms.
- Do not place the device outdoors.
- Do not use the power supply if it is damaged or the cable has been kinked.
- Do not use a Quick charge power supply (Power Delivery, PD)
- Do not place heavy or pointed objects on the power cord.
- Do not touch any parts connected to the mains with wet fingers.
- Only use water of good drinking quality if you intend to drink the water afterwards.
- You must not use carbonated water (sparkling water). This could cause the device to explode.
- Do not open the power supply unit or the base unit and do not attempt any repairs in the event of it being defect. If so, disconnect the device from the power supply immediately and notify your dealer.
- Do not dispose of the device in household waste.

7 – Preparation for operation and charging

1. Place the device on a dry flat surface.
2. Insert the USB-C plug of the power adapter and charger into the socket. The battery must be fully charged before first use.
3. The LED starts flashing red.
4. Before the first operation, fill the glass container with max. 60° C warm water and let it stand for at least 2 hours to moisten the membrane cell completely. Finally, renew the water again and shake for about one minute.
5. Then you can fill with the water that you want to enrich with hydrogen and drink. Only enough water should be poured in so that the water level does not touch the pressure cap, so that no water penetrates there.
6. At the end of the charging process, the LED lights up permanently green.
7. Remove the plug from the power supply and charging unit. If possible, the generator should not be operated during charging due to battery wear.
8. If the LED starts flashing during operation, the power supply and charger must be reconnected until the battery is charged.
9. If the power adapter is defective or not at hand, you can also use a common USB-C power adapter, for example for smartphones.
10. Fast charging (Power Delivery/ PD) NOT ALLOWED.



It is normal if there is some water/moisture in the production tank when the unit is delivered. The membrane between the electrodes should always be kept moist.

8 – Hydrogen water production

Important: The device must be filled with water before you press the Start button.

- Press the start button for 3 seconds. A beep indicates the start. Blue light turns on and you can recognize the hydrogen production by the fine bubbles rising. **This production process takes 5 minutes.**
- If you press the start button again briefly, the **10 min operation LED-light in the generator will shine green.** The switch lights up orange.
- If the light changes to red and flashes, you should recharge the device. During the charging process, the LED is permanently red until a green light indicates completed charging. You should not produce hydrogen water during the charging process, since it can damage the battery in the long run.
- Each production phase ends automatically. This can be recognized by the LED going out and the bubble formation ceases. If you want to stop a running production, press the start button again for 3 seconds.
- For the 40 min. special operation for filling the Aquavolta® H2 Rocket Two Stage, briefly press the start button again during the operating mode. **The LED shines purple for 40 minutes** provided the battery is sufficiently charged. The button will shine pink.

Use with the optional

Aquavolta® H2 Rocket Two Stage

Ideal use of the H2 Turbo Bosster with the 240ml production bottle:

1. Water almost to the brim, NOT TOUCHING THE BRIM, close and start electrolysis.
2. After 5 minutes running time over 3-4 ppm molecular dissolved Hydrogen is expected. Later you can run electrolysis for another 5 minutes to achieve high results.
3. It can only stay sealed for so long until someone gets thirsty again.
4. After drinking, refill immediately and start the 5 minute electrolysis again.

10 – Cleaning / Equipment hygiene / Descaling

- The inside of the Tritan container and the grid-shaped round minus electrode, which produces the hydrogen, must be cleaned with 1 teaspoon of citric acid dissolved in lukewarm water if there are visible traces of limescale.
- Close the screw cap and press the Start button once for the 5 min program. Let the Citric Acid powder have effect for 30 min. Then rinse the container as well as the lid and the electrode with warm water more than once.
- Then fill the container to the brim and run the 10-minute program. During this process, drops of water will escape from the lid. This rinses the safety valve in the lid.
- This cleaning is also required monthly for hygienic reasons.
- Wipe the exterior of the unit with a damp soft cloth.
- If the production vessel becomes cloudy, scratched or heavily soiled, replace it with the supplied replacement vessel.
- Store the instrument at room temperature and out of direct sunlight.

Aquavolta® H_2 - Turbo	Technical data
Dimensions	Diameter: 61mm Height: 210mm
Weight (empty)	330 g
Total weight	1,8 kg
Voltage/Power	DC 5V / 2A
Power reserve/battery	1500 mAh/7,4 V, enough for ca. 25 uses (5 Min.) if fully charged
Charging time Operating time	ca. 180 minutes ca. 120 minutes (water dependant)
Power supply unit (USB-C)	100-240 V, 50/60 Hz, DC 5V, 2A
Hydrogen output	Depending on: Fill level, water and time approx. 0.6 ppm per min with the 240 ml production container
Water temperature	4 to maximum 55°C
Temperature range	0 to 40°C

11 – Error check/service/warranty

Problem	Cause check	Solution
Booster does not work (no bubble production)	Battery charged? Calcified?	Charge with USB-C or decalcify with citric acid powder
LED not blinking	Battery charged?	Charge with USB-C
Will not charge	Check plug and cable	Replace the power adapter and/or USB-C cable if necessary. **Fast charging is not allowed!**
Leakage	Check whether the leak is located between the production tank and the generator. If the leak appears to be in the generator, water is usually coming out of the small hole at the bottom.	Replace the production tank with a replacement tank. Check the fit of the seal on the generator. If loosened, replace with supplied replacement seal. It is very rarely the seal, almost always the tank! If not fixed, it is best to contact Aquacentrum directly by email: h2@aquacentrum.de

Your retailer is your contact person responsible for warranty services. This applies in particular to commitments that exceed the two-year statutory warranty. All warranty promises are therefore listed on the sales receipt (invoice) of your retailer.

Aquavolta® General Sales and Service Center:
Owner Yasin Akgün
Engineer TUM
Aquacentrum
Münchener Str. 4 a
D-85748 Garching bei München
www.aquacentrum.de

AQUACENTRUM
WATER. AND BEYOND.

- Waste Electrical Equipment Register: WEEE-Reg.-Nr. DE 93599565
- Aquavolta® is a word mark protected by the German Patent and Trademark Office as well as by the EUIPO

AQUAVOLTA®

Please note the serial number here for service queries.
You will find this on the underside of your H2 generator.

Your Serial Number:

Exploded view of the electrolysis cell (PEM)