

A modern kitchen faucet with a digital display on top, set against a dark countertop with a fruit basket.

AquaVolta® Elégance
Under the Counter Water Ionizer

Manual

by Karl Heinz Asenbaum

AQUAVOLTA®

2 – What is AquaVolta®?

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 referred to as „reduced“ or „ionized“ water. Electro-activated water is made with a water ionizer with so-called diaphragm-electrolysis.

The characteristic of AquaVolta® is that a negative electrical tension with a measurement electrode shows a so-called negative redox 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 an about 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 therapeutic use, 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 DH_2 . As well as that is the pH-value of the drinking water raised and is therefor called “alkaline activated water”.

3 – Hydrogen – The fundamental concepts

„I run on Hydrogen“. To see Hydrogen cars, out of which no emissions are emitted and only clear water drips out, is still seldom in our smog-laden cities. Yet there is no doubt that Hydrogen gas presents the most interesting form of alternative energies of the future. For 1 kg of Hydrogen brings 33,33 kWh/kg onto the road. Neither petrol (12 kWh/kg) nor natural gas (max. 13,1 kWh/kg) can keep up. Hydrogen, with the H symbol that stands for Hydrogenium (“The Water Producer”) is the most common element in the universe. It makes up 75% of the total mass of our solar system. Yet on our planet Earth it is more of a scarce good. Only 0.12% of the total mass consists of Hydrogen. Most of it is H₂O which has bonded as “energy-less” water in our oceans. Water, H₂O, is Hydrogen gas H₂ which has been combusted by oxygen. This occurs, for example, with sugar which is converted from food into energy. So Hydrogen doesn’t only provide energy for fuel cells for cars, but also for the cells in the body. The H Hydrogen atom is made up of one positively charged nucleus, the proton, which is orbited by a negatively charged electron. The smallest of all atoms is also called “nascent” Hydrogen: That means “hydrogen in its birth phase”, for an H-atom does not stay alone for long, it bonds with a second H-atom to make what we usually call Hydrogen, H₂... A further description for this Hydrogen atom is “Hydrogen radical”.

Often Hydrogen gas H₂ is confused with the **Hydrogen ion H⁺**. This corresponds to an H-atom without an electron, in short it is a single proton. Positively charged Hydrogen ions are the measure of “acidity”. They occur by the splitting off of a hydroxide ion (OH⁻) from water (H₂O). If there are more hydroxide ions in an aqueous solution, it is alkaline, if there are more H⁺ ions (protons), then it is acidic.

Negatively charged Hydrogen ions (Hydride ions) theoretically also exist. Yet they are so unstable that they only occur as compounds.



4 – What does the AquaVolta® Elégance provide?

Molecular hydrogen is, next to the alkaline pH value, the most interesting point when producing alkaline activated water. Yet this gas molecule does not like to dissolve in water.

Nevertheless do 1,6mg/Liter have room in the water under normal atmospheric pressure conditions. This is significant because from 0,5mg do international researchers claim it is “therapeutic”.

For a desired level of 0,5 to 1,3 mg/Liter, to reach already with a flow speed of 1-2 Liters per minute does the AquaVolta® Elégance water ionizer produce substantially more hydrogen than what can be dissolved in water in such a short time. It produces a pressure which speeds up the dissolving of gases in the water. One can see, for example with the hydrogen bubbles that, especially with higher water temperatures, bubble up and gas out of the water shortly after filling the glass. Yet it is the invisible rest that bonds with the water.

This bond is, for example when shaking the water, very sensitive and dependant of environmental factors such as temperature and atmospheric pressure. This can be easier understood if you think about a similar bond, which we all know from everyday life: Also fizzy water enriched with carbon dioxide quickly gases out and tastes flat if you leave it open for too long.

For that reason it is good to drink alkaline activated water soon after having poured it into a glass or a bottle. Tips for storing you will find on page 19.



5 – Chapter overview

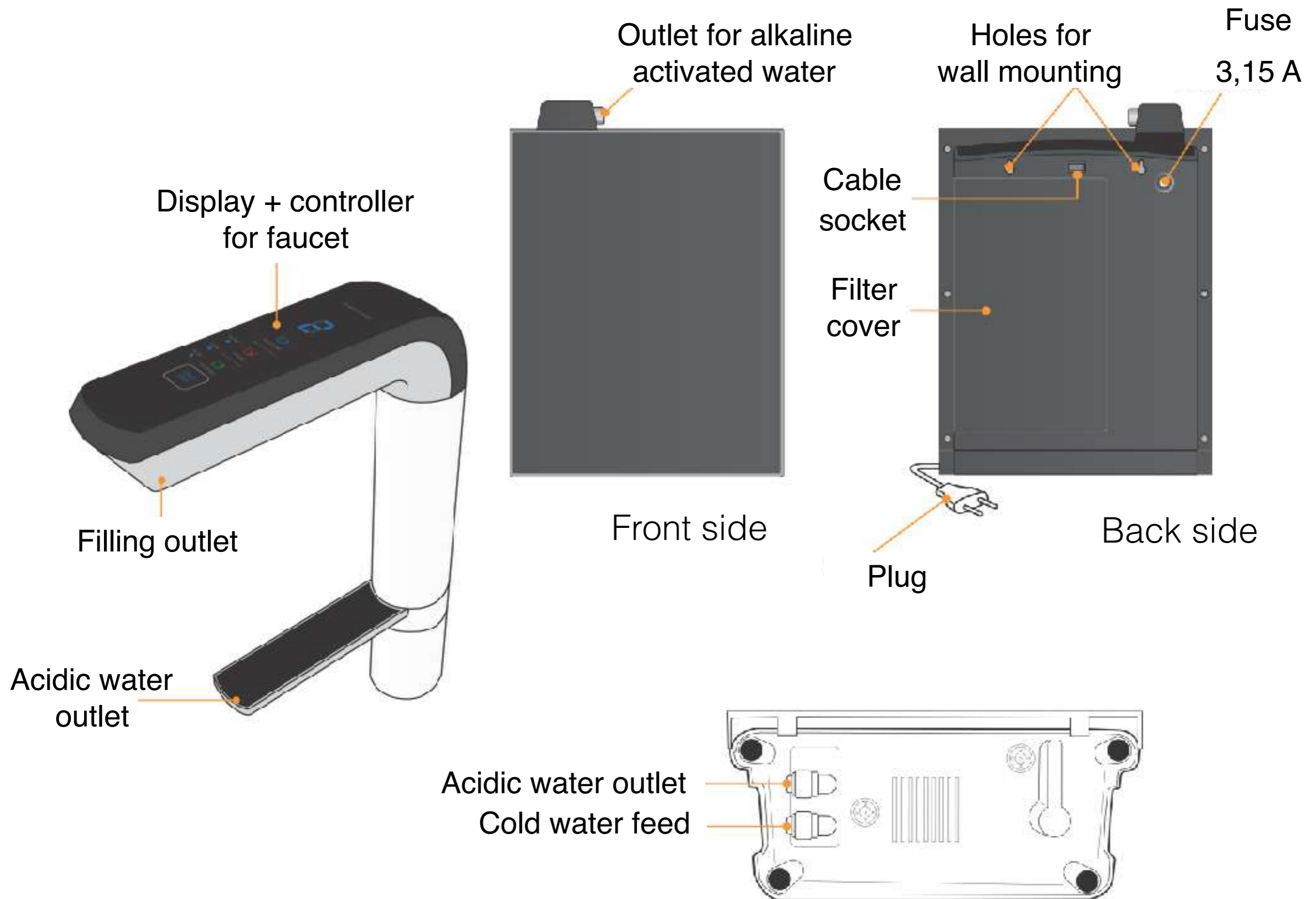
- 06 - General safety instructions
- 07 – Overview
- 08 – Over the counter faucet
- 09 – Faucet connections
- 12 – Accessories
- 10 – The operating modes - alkaline/acidic/purified
- 11 – The interior filter
- 12 – Filter exchange
- 13 – Installation overview for installers
- 14 – Preparation of the device
- 15 – Fitting the faucet
- 16 – Installation for the water supply
- 17 – pH-measuring and water flow setting
- 18 – Manual descaling
- 19 – Storing alkaline activated water
- 20 – Troubleshooting
- 21 – External cleaning / storage. Technical data
- 22 – Hydrogen water – not just for drinking!
- 23 – Legal disclosure
- 24 – Service and guarantee



6 – General safety instructions

- Only use the device once you have read and understood the instruction manual.
- You are not allowed to use the device with water over 35 degrees C. Should you connect a mixer tap, be very careful that hot water does not flow into the device.
- Only operate the device with 220 Volt.
- Please ensure that children do not have access to this device.
- Never place the device under water. A moist cloth is enough to clean it. Do not use chemical cleaning products.
- Never drop the device.
- Do not place the device in direct sunlight or subject to temperatures over 50 Degrees.
- Do not place the device in moist or polluted rooms.
- Do not place the device outdoors.
- Do not use the power charger if it got damaged or the cable got kinked.
- Do not place heavy or pointed objects on the cable.
- Do not touch any of the components connected to the power grid with moist fingers.
- Only use water of the best drinking quality if you want to drink the water afterwards.
- You cannot use de-ionized water, i.e. from a reverse osmosis device. A conductivity of at least 50 TDS-ppm is needed.
- In case the device is defect, do not turn on the tap and do not attempt to repair it. Disconnect it from the power supply immediately, close the water supply and inform your dealer.

7 – Overview



08 – Over the counter faucet

Swivelling double faucet with operating surface



Filter display
DARC display
Flow display



Display operating mode

“Alkaline” switch

“Acidic” switch

“Filtered” switch

Start/Stop button

9 – Faucet connections



1/4 inch connector



PE hose 1/4". 1,5 m



5/16 inch connector



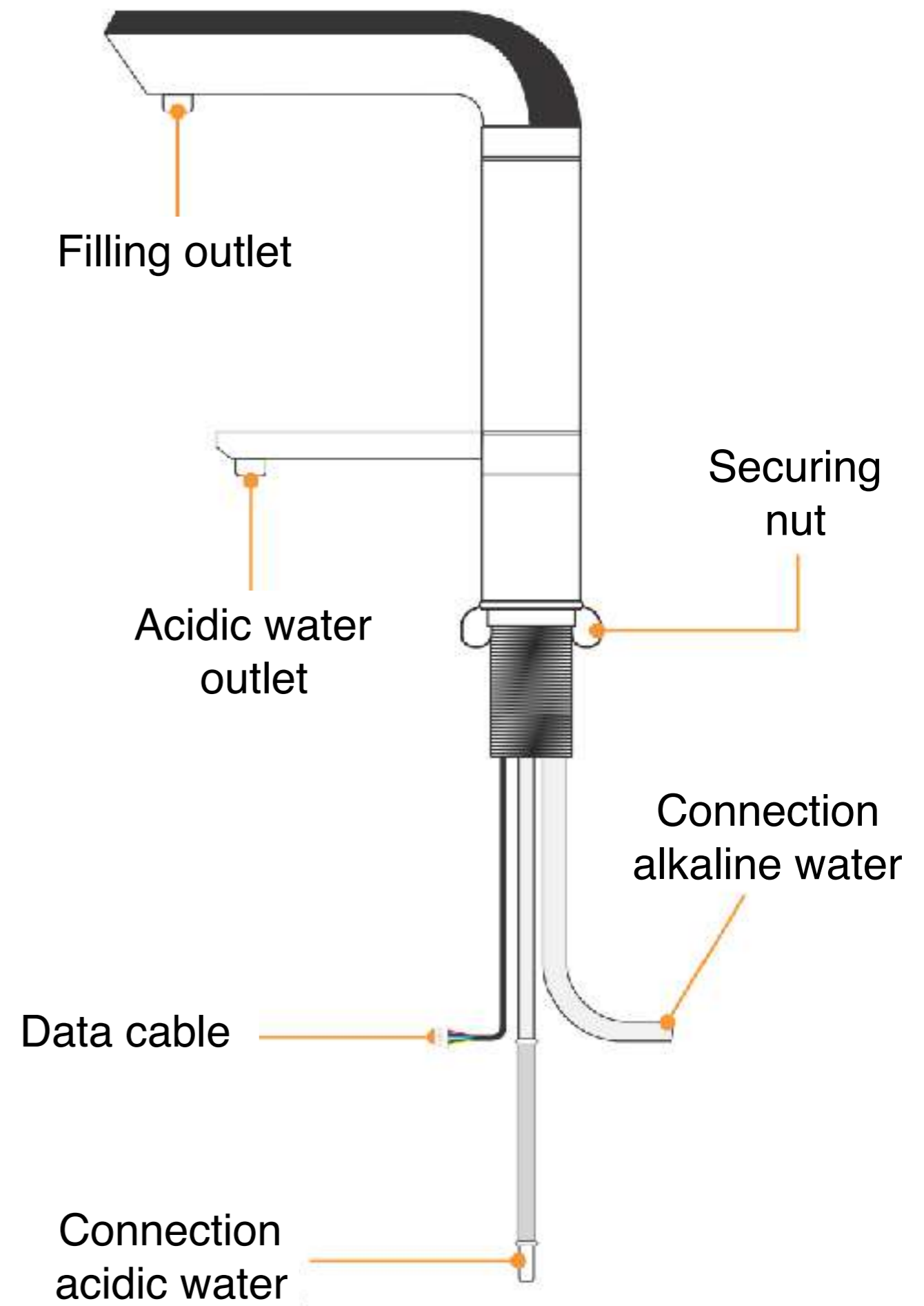
PE hose 5/16". 1,5 m



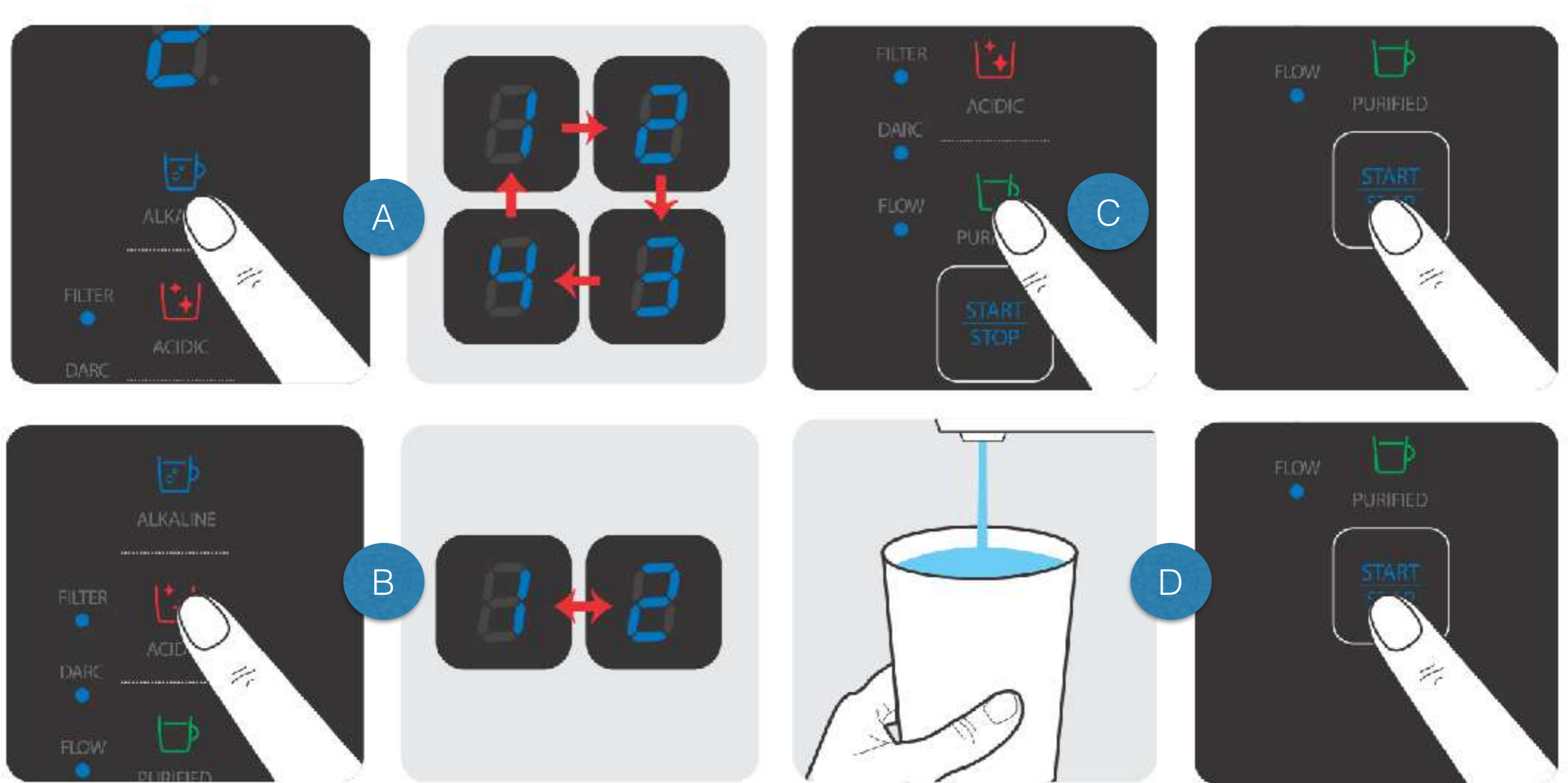
Alkaline water connection nipple



5/16 inch elbow connector



10 – The operating modes - alkaline/acidic/purified



To determine **which type of water should flow from the upper dispensing spout**: First select ALKALINE (A) or ACIDIC (B) or PURIFIED (C) (filtered only). Press several times to select the steps for A (4) and for B (2). The dispensing process starts and stops when pressing button D. From the lower outlet tap, water is acidic, B is alkaline water and C is filtered water.

From A and B all water is always filtered!

11 – The interior filter

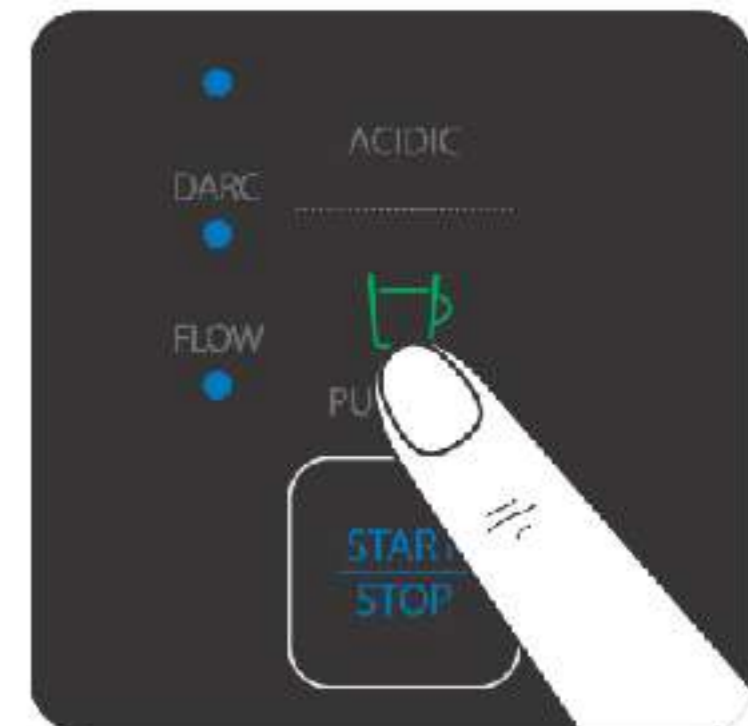
The filter has a capacity for 3600 Liters.
Independently of that, even with little use must the filter be exchanged after 6 months.

This is a complex combination filter for all known pollutants in water. It is made up of fabric and sediment filter layers, highly compressed filter fleece, a carbon block, silver steamed bamboo active carbon granules, 3 layers of antibacterial ceramic, calcium sulphite for chlorine removal.

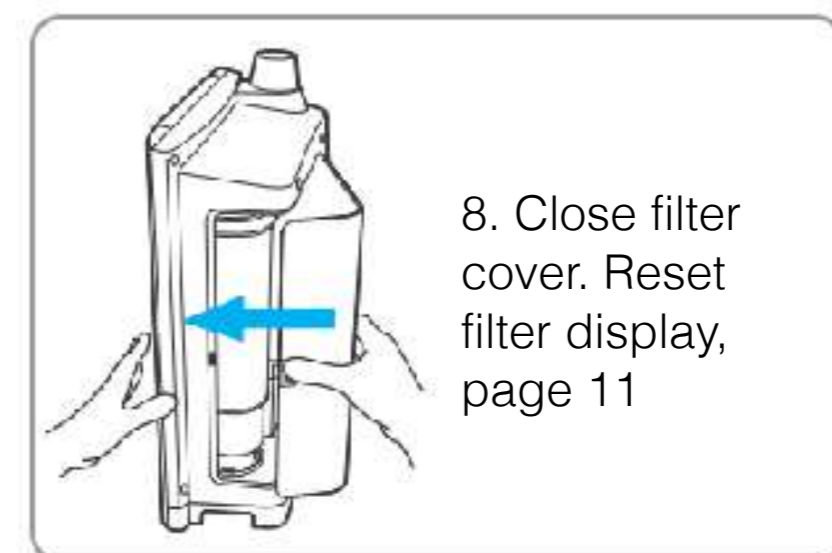
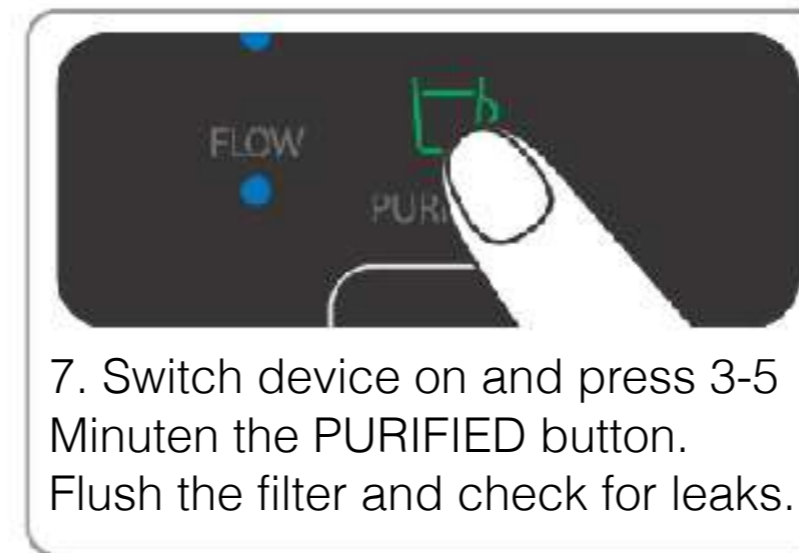
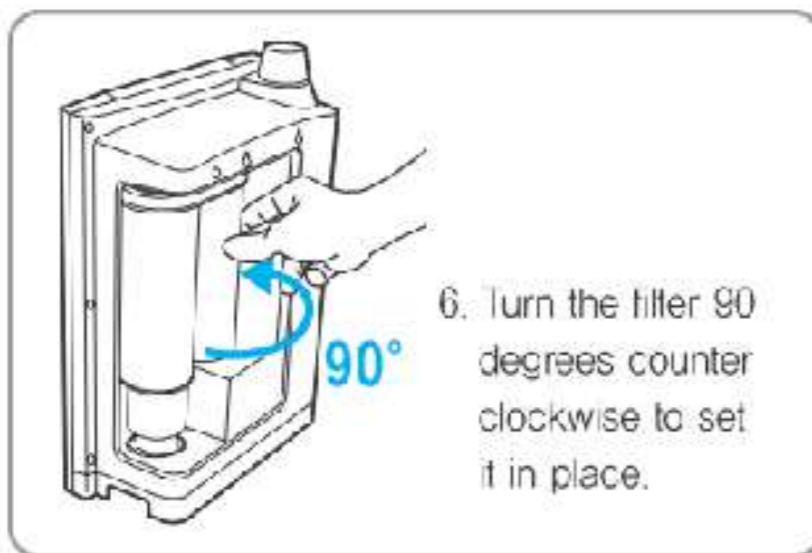
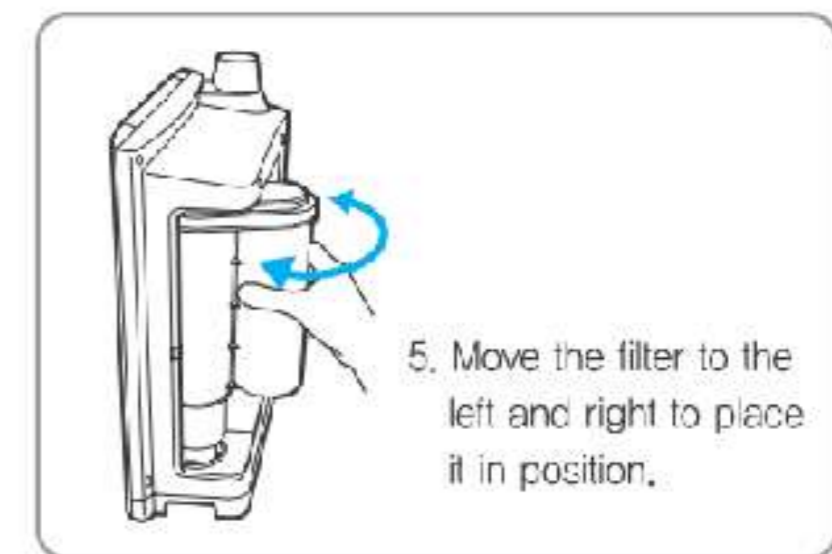
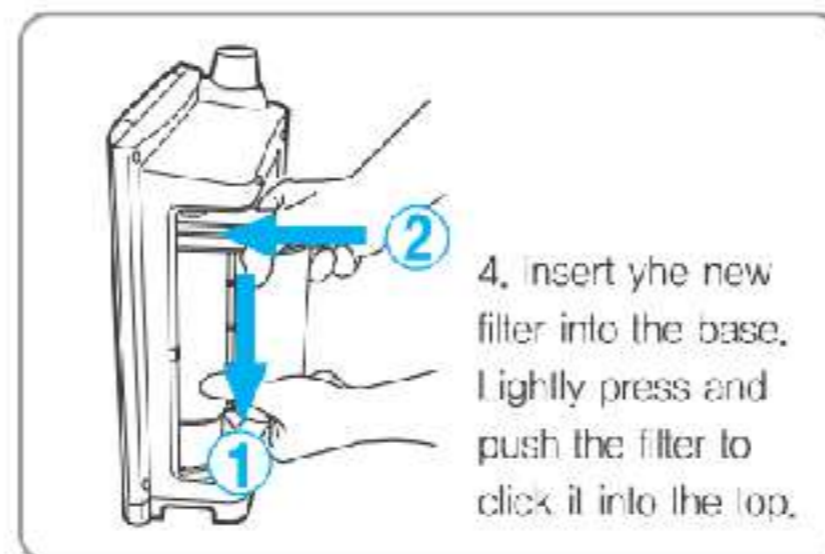
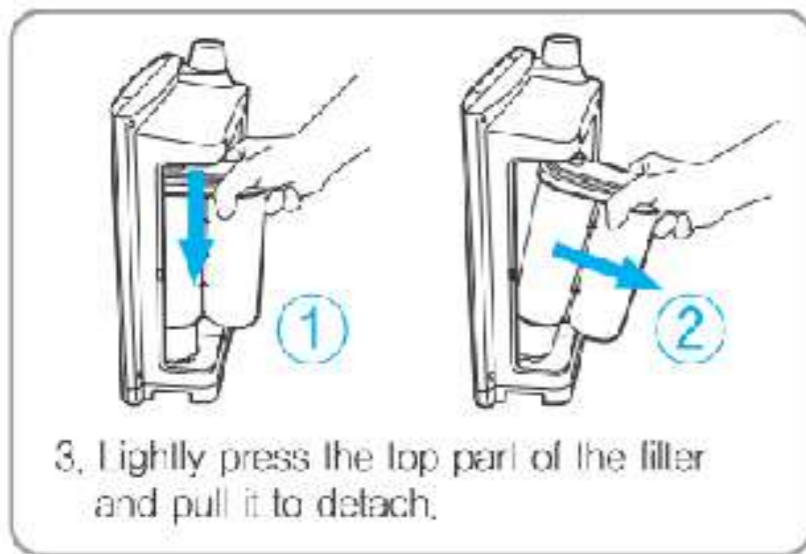
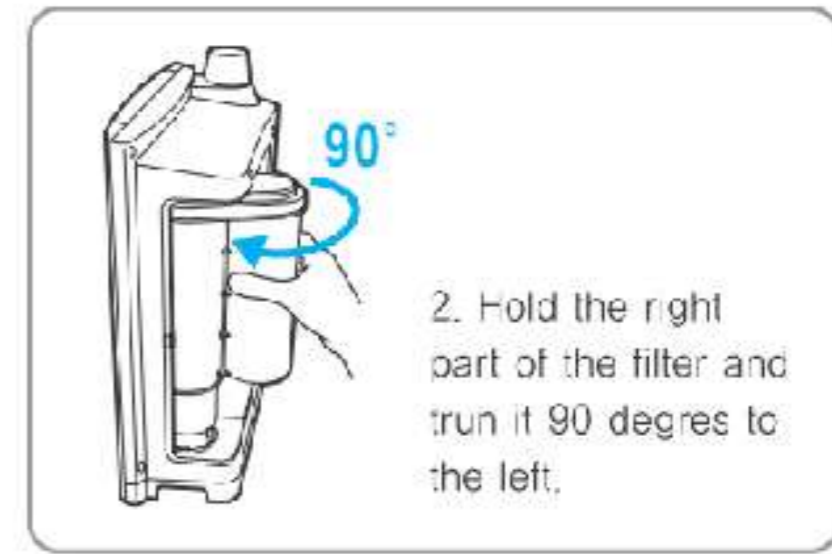
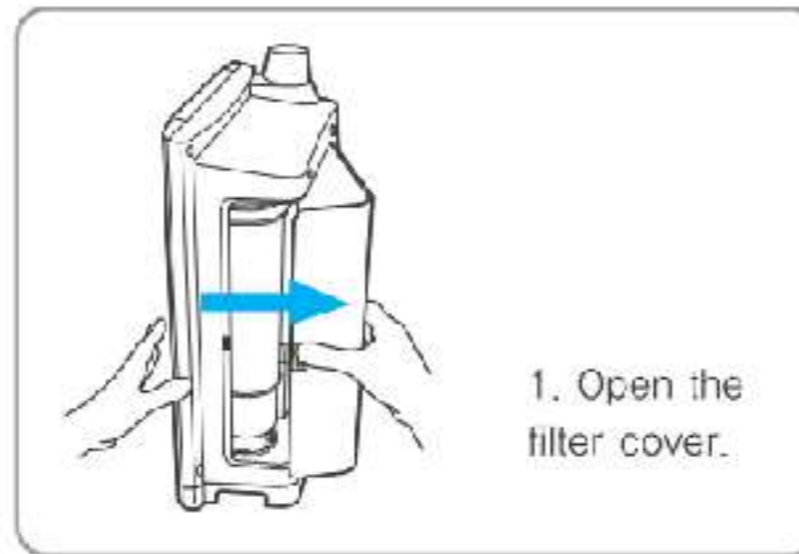


Setting the filter monitoring after exchange:

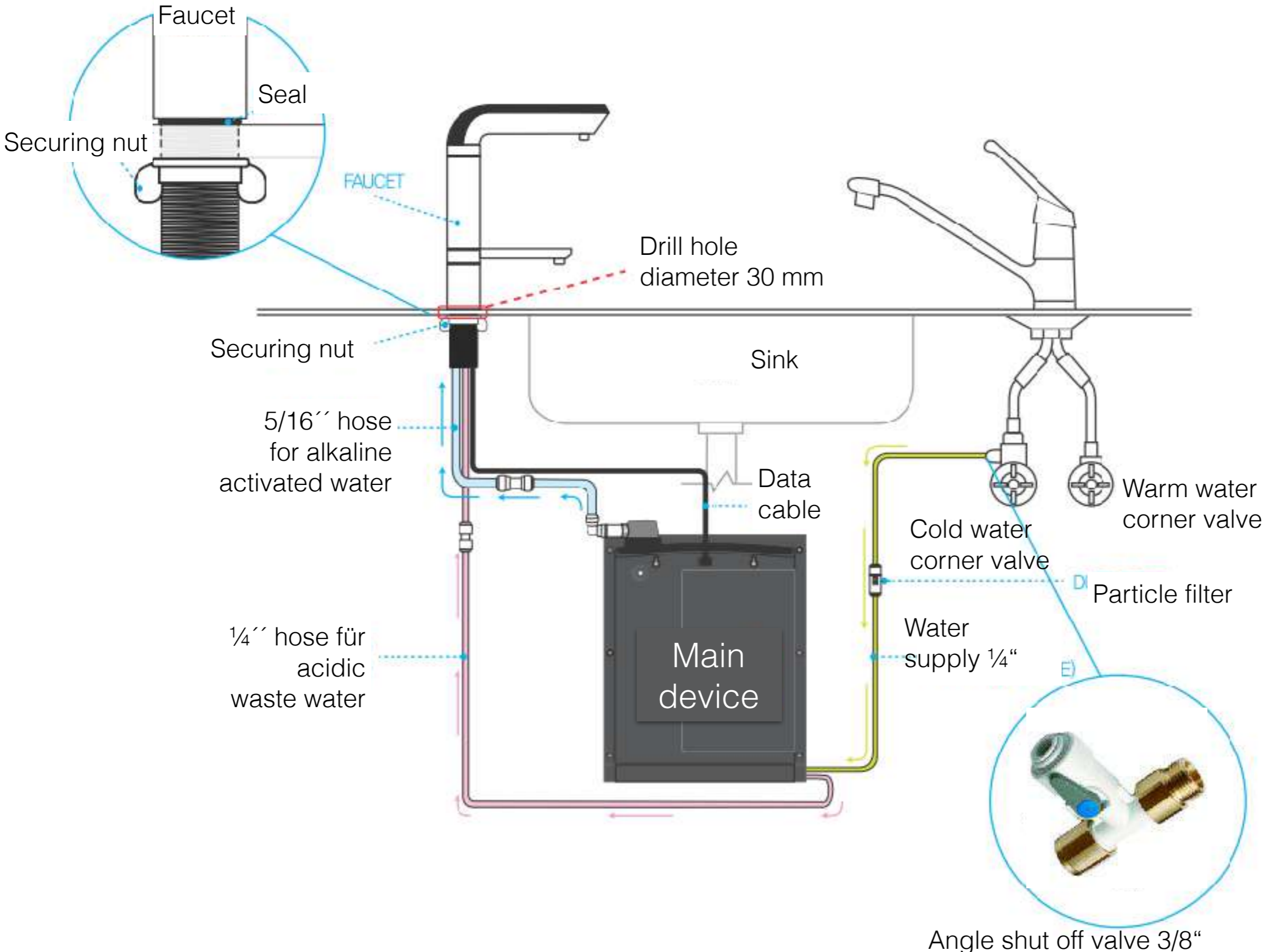
- How to exchange the filter you see on page 12.
- Press the PURIFIED button for 5 seconds.
- Once you hear the “bing” sound has the filter capacity display been reset.



12 – Filter exchange

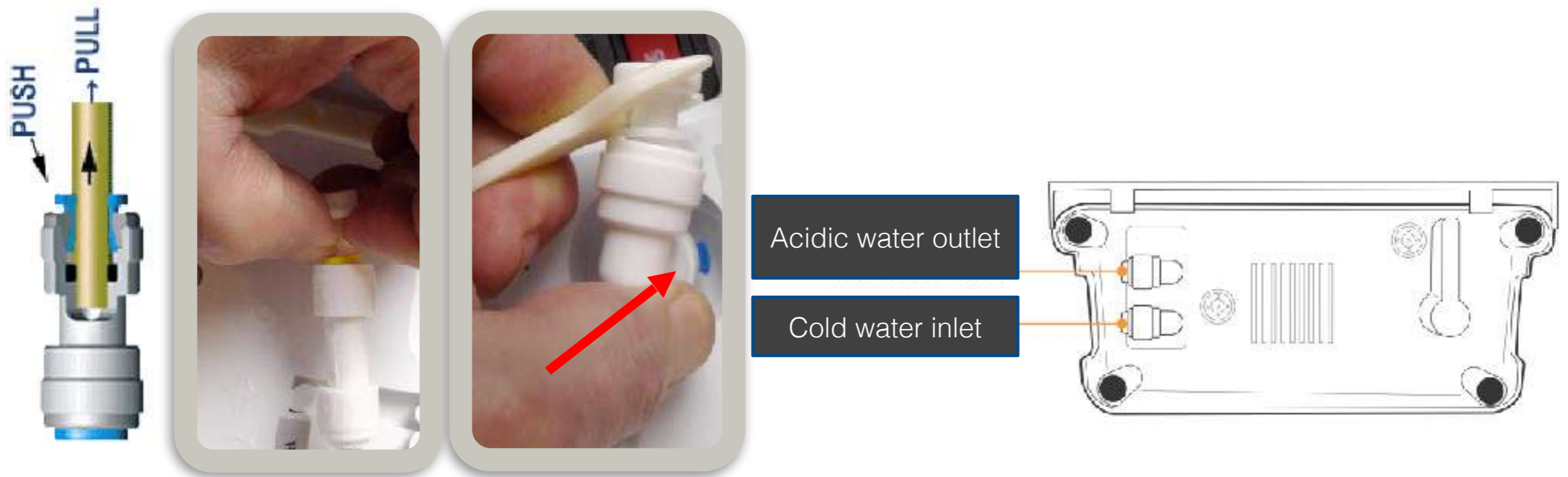


13 – Installation overview for installers



14 – Preparation of the device

1. The quick coupling for the hoses is done by pushing them firmly into the socket. Then they are sealed.
2. The quick coupling on the bottom of the device are closed with sealing caps. These caps have to be removed before installing.
3. To do this please follow the indications of the diagram. PUSH the ring down and at the same time PULL the cap or hose out of the socket.
4. With a bit of skill this can also be achieved with your fingers. If necessary you can use a flat spanner. Please keep the caps for transportation.



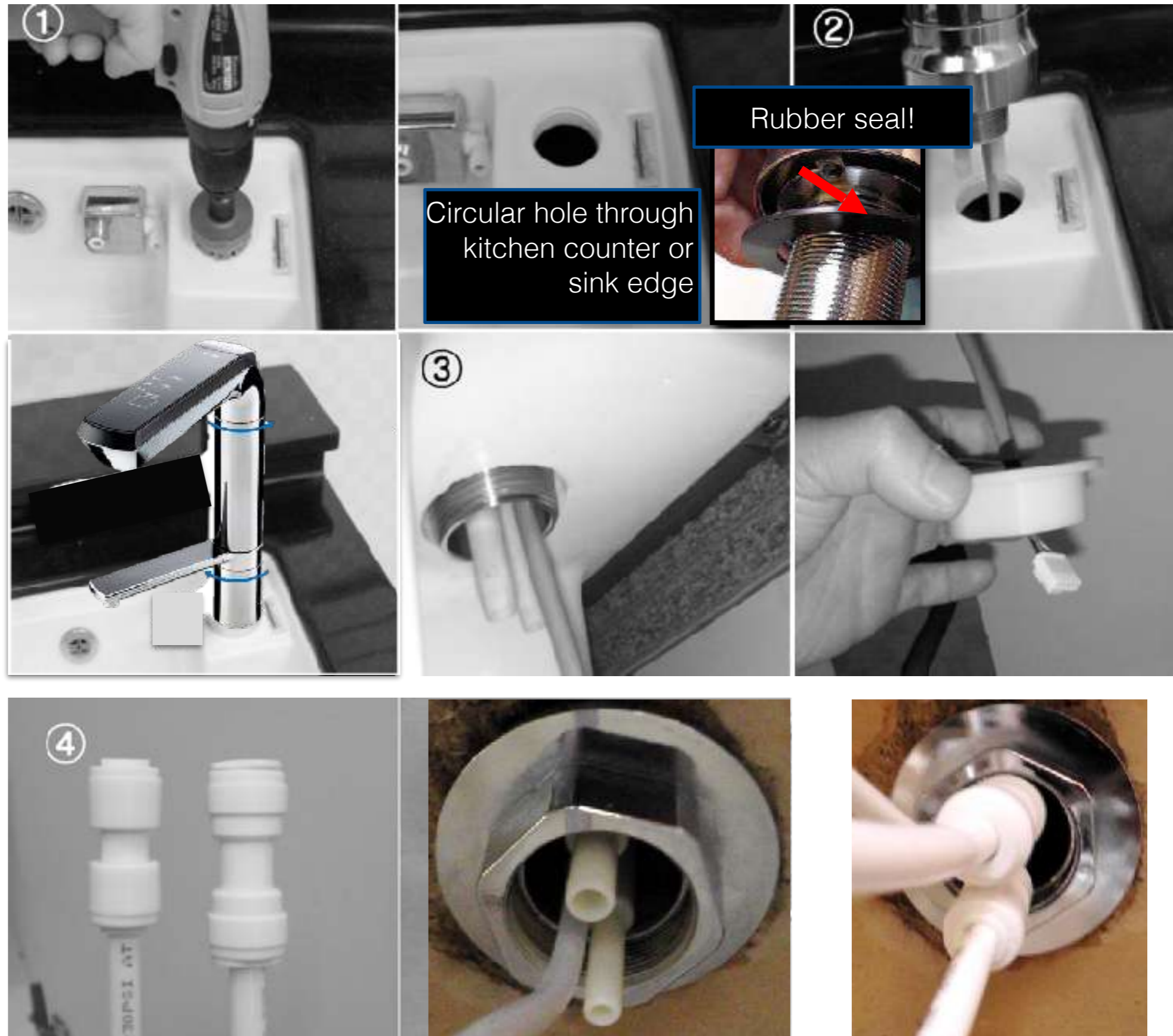
15 – Fitting the faucet (Specialist needed)

1. A hole with a diameter of 30 mm has to be drilled for the double faucet close to the edge of the sink into the kitchen counter or the sink edge. Both outlets should allow water to flow into the sink.

2. Place in this hole the double faucet and the rubber seal from above.

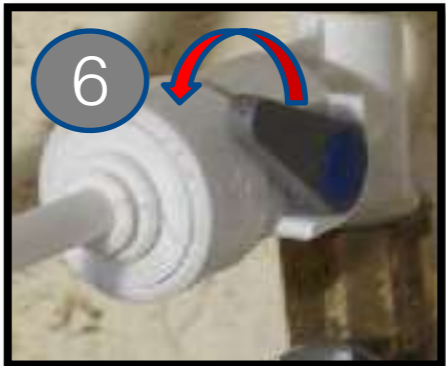
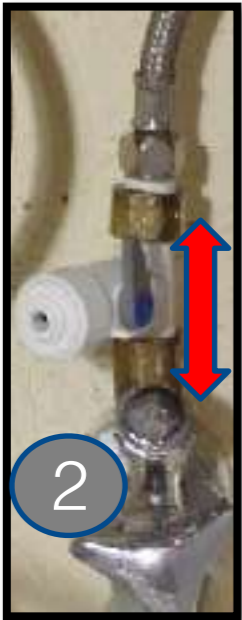
3. From below attach the securing nut over the data cable up to the screw thread of the double faucet and screw it shut until the faucet is secure.

4. Place the correct supply hoses in the adapters and slide the top part of the adapters firmly from below onto the two connectors.



16 – Installation for the water supply (with a specialist)

1. When you have switched off the water supply, release at the 3/8 corner valve the supply line to the cold water supply of your sink.
2. Mount the angle shut off valve between the corner valve and the supply line to the cold water supply.
3. Place one end of 1/4" hose firmly into the ring coupling of the angle shut off valve.
4. Please ensure that the grey lever on the angle shut off valve is positioned on "shut" (4). Only when positioned like this can you open the water supply at the corner valve again.
5. First, when the other end of the 1/4" hose is firmly connected to the cold water socket of the ionizer (5), by turning the grey lever can you regulate (6) (7) the amount of water that should flow into the ionizer.



17 – pH-measuring and optimal water flow setting

pH 0	10.000.000	0,0000001
pH 1	1.000.000	0,000001
pH 2	100.000	0,00001
pH 3	10.000	0,00001
pH 4	1.000	0,001
pH 5	100	0,01
pH 6	10	0,1
pH 7	1	1
pH 8	0,100000000000	10
pH 9	0,010000000000	100
pH 10	0,001000000000	1.000
pH 11	0,000100000000	10.000
pH 12	0,000010000000	100.000
pH 13	0,000001000000	1.000.000
pH 14	0,000000100000	10.000.000
H ⁺ (H ₃ O ⁺)-Ionen		OH ⁻ (Hydroxid)-Ionen
H ₊ (H ⁺)-Ionen		OH ⁻ (Hydroxid)-Ionen

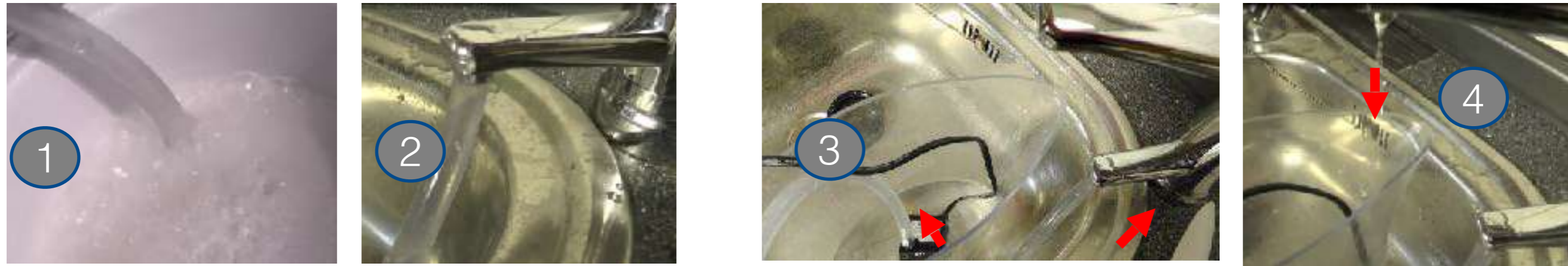
1. The pH value indicates the amount of H₃O⁺ -ions found in the water. The fewer the water contains, the more alkaline it is. Alkaline activated water should be about 100 times more alkaline than tap water (pH 7). It is therefore 10.000 times more alkaline than coffee or a fizzy mineral water and 1 million times more alkaline than a lemonade.
2. Optimal drinking has been proven to be at a pH value between 9 and 9.5, these are the top limits of the German drinking water ordinance. When starting your device you have pH indicator drops with a colour scheme for you to measure and obtain the desired pH level with your chosen water.
3. Even though there is no exact predictability of the ionizer results, because each type of water has a different composition, as a thumb rule it is said to the achievement of a drink with a pH of 9-9,5:



- soft water up to dH hardness 9: Flow amount approx. 2 L/Min
- medium hard water dH 10 - 15: Flow amount approx. 1,5 L/Min
- hard water dH 16 - 20: Flow amount approx. 1,2 L/Min.
- very hard water dH 21 +: Flow amount approx. 1 L/Min

- You only have to do the test once for each water type, unless in your region you have strong seasonal hardness fluctuations. You receive information about this from your water supplier. It is easy to carry out the test: (Do not drink the test liquid and keep it away from children!)
- Draw a small amount, as pictured and add 2 drops of the indicator fluid.
- Compare the desired value with the colour scheme and adjust the water flow with the grey lever at the angle shut off valve under the sink.

18 – Manual descaling



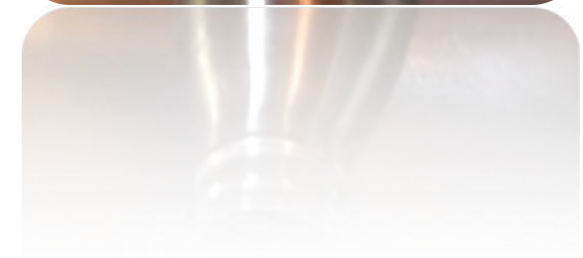
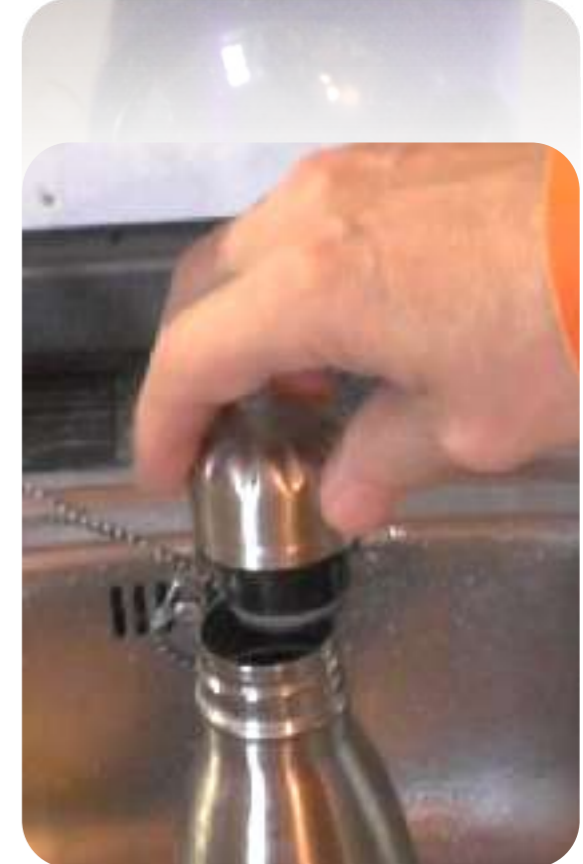
The AquaVolta® Elégance is fully equipped with the DMRC-reverse flow system, which prevents calcification of the electrolysis cells lastingly. Nevertheless does alkaline activated water leave traces of limescale in the rest of the system, which have to be removed periodically. The descaling accessories consist of an electric descaling pump, with a soft hose and removal powder (citric acid), which you can buy as an organic limescale remover at any chemists. You will also need a jug (i.e.: measuring jug) for the pump and for filling with the descaling solution.

1. You can heat up one end of the soft hose in boiling water and make it softer.
2. Place the softer end of the hose over the lower outlet of the double faucet. The other (cold) hose end place onto the socket of the descaling pump and place in the bottom of the jug.
3. Place the jug with the pump under the upper outlet of the double faucet. Like this it is under the outlet and collects the descaling solution.
4. After you have filled the jug with dissolved descaling solution (max. temperature 35 Degrees Celsius - lukewarm), plug the pump in (220 V) and wait until the pump produces a cycle so that water flows out of the upper outlet back into the jug. After 1 hour unplug the pump. Rinse the container and the pump thoroughly with cold water and allow to dry. Before you draw activated water, let the ionizer run in the PURE mode for about 5 minutes, to remove any remaining descaling agents.

Frequency: With water up to hardness dH 10 (4 months), dH 11-16 (2 months), dH >17 (1 month). Like this you prolong the durability, performance and efficiency of your device.

19 – Storing alkaline activated water

1. Next to its alkaline properties is the most important advantage of alkaline activated water the maximum amount of dissolved hydrogen. Hydrogen is a very volatile gas and because of its minimally small molecule size can only very dense materials like glass, HD Polyethylen or stainless steel impede it from escaping water in a few hours. Always watch out when filling or decanting, that the containers are filled to the brim and no air bubbles remain. After opening, the contents should be drunk quickly and the rest decanted into smaller containers which also should be filled to the brim.
2. Cool temperatures favour the continuity of hydrogen in water. We recommend horizontal storage in the fridge. Apart from the practical 2 Liter bottle are for example, swing top bottles very suitable. The colour of the glass makes a slight difference. Decisive is the thickness of the glass and the horizontal storage.
4. Very suitable when on the go are double walled thermos flasks made of stainless steel. They keep the water cool even without refrigerating it. By being able to screw the cap on can all air bubbles be pressed out of the water. Like this is a very long storage life assured.
6. Acidic activated water keeps for weeks. It should not be kept in metal containers.



20 – Troubleshooting

Symptom	Check	Possible solutions
No electricity. Start/Stop does not light up	Properly plugged in? Fuse defect?	Plug in correctly. Change the fuse.
Even though Start/Stop lights up, very little or no water flows out.	<ul style="list-style-type: none"> • Corner valve or angle shut off valve closed? • Hose bent? • Water pressure too low? • Water frozen? • Filter blocked? 	<ul style="list-style-type: none"> • Open valves. • Straighten hose. • Raise pressure to minimum pressure (1,0 l/Minute). • Wait until pipes are defrosted. • Exchange filter.
Activated water not alkaline enough.	<ul style="list-style-type: none"> • Is the water flow too fast? • Does acidic water flow out? 	<ul style="list-style-type: none"> • Reduce the water flow with the grey lever on the angle shut off valve. • Consult your dealer.
Suddenly water stops when filling.	Where more than 10 minutes at a time filled?	Automatic deactivation when overloaded. Please wait until the Start/Stop display is lit up.
Water leak at the filter.	<ul style="list-style-type: none"> • Not correctly installed? • Does water come out of the device? 	In case the filter has not been placed correctly, stop the water supply and unplug the device. Please inform your dealer.
Water tastes strange.	<ul style="list-style-type: none"> • Not used in a long time? • Too alkaline? • Overlooked the filter exchange? 	<ul style="list-style-type: none"> • Rinse device for 3-5 minutes in the PURIFIED mode. • Raise the water flow with the grey lever on the angle shut off valve. • Exchange the filter.
Activated water is milky or secretes lime.	Does the milkyness not disappear after 10 seconds?	This is normal sedimentation of calcium carbonate during the relaxation of activated water. Traces can be removed with the descaled solution.

21 – External cleaning / storage. Technical data

Wipe the outside of the device with a moist, soft cloth.

Store the device at room temperature and do not place in direct sunlight.

If you have not used the device in over a week or after transporting, the device has to be flushed for 3-5 minutes (PURIFIED mode).

If not used in 2 weeks, you should remove the filter and place it into a sealed plastic bag in the fridge. Do not forget to place the filter into the ionizer once back and to rinse it for 3-5 minutes.

Producer	Ion Co., Ltd, South Korea für Aquacentrum
Model	Ionpia UD-1000 D
Dimensions (undersink)	38,5 x 28,4 + 13,5 cm
Dimensions faucet	Drill hole 3 cm
Weight device/faucet	6 kg/1,39 kg
Electricity data	3,15 A/200 W (maximum)/220 – 240 V AC
Water pressure area/Flow quantity	1 – 7 kg/cm ² /1 -3 Liter per minute
Descaling method	DMRC permanent flow reversal + manual periodically

22 – Hydrogen water – not just for drinking!



- Drink up to 0,3 l of water per 10 kg of bodyweight daily.
- The AquaVolta® Elégance can store enough hydrogen in the water for it to be suitable for laying foods in which are then freshened up. For that we advise to always use Alkaline Level 4.
- Lay fruit, salads, cut flowers, raw eggs, fish, meat and vegetables in fresh alkaline hydrogen water Level 4 for 15-30 minutes. These refresh themselves by absorbing Hydrogen, which is even absorbed through eggshells. With the absorption of hydrogen does the ORP of the foods sink, something the foods inspector Dr. Manfred Hoffmann regards as a sign of higher quality of nourishment. Mix milk powders, diet powders, fitness powders etc. with hydrogen water. Dissolve mineral and vitamin mixes with this water. Also like this the ORP sinks favourably thanks to the dissolved hydrogen.
- Buy juice concentrates - preferably organic. Like this you put an end to carrying the juice cartons and consequential pollution. No seller on the market can deliver juices with a better ORP. See: Asenbaum, K. H., Electro Activated Water, Munich 2016, page 42 ff.
- Mix alcoholic drinks and cocktails with Hydrogen water. They become milder, the taste can be appreciated more. Make ice-cubes out of hydrogen water.
- After alcohol intake drink 2 glasses in the evening as well as 2 glasses the next morning on an empty stomach.
- Give your pets (dogs, cats ...) hydrogen rich electrolysis water to drink and observe how their fur and general health positively improves.

23 – Legal disclosure

An instruction book by Aquavolta UG (limited liability). Georgenstrasse 110, 80798 Munich.
Author and copyright: Karl Heinz Asenbaum. Email: aquavolta@email.de

IMPORTANT NOTES

This instruction book contains important information. Read the whole book and if necessary repeatedly. Do not throw it away in case you wish to read it again!

You can and should ask questions and queries. The contact address is shown above.

No responsibility is taken for improper handling, mounting and/or operation.

DISPOSAL INSTRUCTIONS

The device contains batteries and cannot be disposed of with household waste. If you would like to dispose of the device, you are obliged to return it to the sales point or send it to the producer. Upon request you can receive a parcel label from the sales point or the producer (p. 24) for returning it.

EXCLUSION OF LIABILITY

Molecular Hydrogen is a naturally and continually occurring gas in the human body, produced amongst other things in the intestinal flora. Risks and side effects from consuming Hydrogen rich water have not been mentioned in scientific literature. Therefore, we do not assume liability for medicinal claims or articles about the effect of ionized water, Hydrogen water and/or electrolyte water.

Author, publisher and producer do not bear liability for decisions and practices made by someone because of the statements made in this publication. Never use this publication as the sole source for health related measures. With health related complaints please seek advice from an accredited doctor or therapist.

24 - Service and guarantee



Your responsible contact person for guarantee services is your dealer. This applies, in particular, to commitments which have surpassed the two-year legal warranty. All guarantee assurances will be listed on your dealers purchase receipt (invoice).

Manufacturer (main importer and service centre):

Aquacentrum, Owner: Yasin Akgün, Fraunhoferstr. 13,
80469 Munich, Germany.

www.aquacentrum.de
www.aquacentrum.com

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