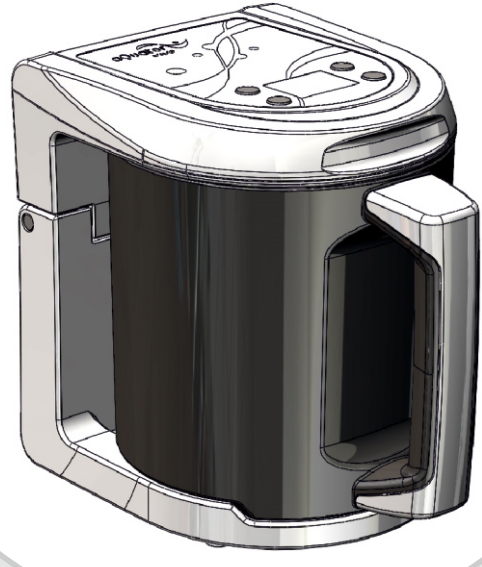
WATER IONISER

aQuator vivo

mod. CLASSIC, SILVER

CE



TECHNICAL DESCRIPTION
AND
USER MANUAL

1. GENERAL DEFINITIONS

Definitions used:

1.1. **Water ioniser** – is a household appliance, which, using process of water electrolysis, makes ionised or silvered water.

1.2. **Ionised water** – acidic or alkaline water, which is simultaneously obtained in separate containers of the water ioniser.

1.3. **Alkaline water** (catholyte) has a slight negative electrical charge and alkaline properties.

1.4. **Acidic water** (anolyte) has a slight positive electrical charge and acidic properties.

1.5. **Partition** (membrane) is produced from special material suitable for electrolysis. It divides containers in two parts, it is conductive to the ions but prevents water from mixing.

1.6. **The dark electrode** (anode) is produced by using rare inert metals and oxide mixtures on the titanium base. This electrode is long-lasting and has good electrochemical and physical-mechanical properties.

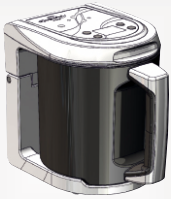
1.7. **The light electrode** (cathode) is made of food grade stainless steel.

1.8. **Silvered water** is water containing silver ions. Concentration of silvered water is measured in milligrams per litre (mg/l).

1.9. Properties of ionised water are indicated by two measurements: ORP (Oxidation-reduction potential) and pH (concentration of hydrogen ions). ORP of ionised water can have either positive or negative charge (mV). pH value can range from 0 to 14 units. The pH of regular tap water is approximately 7.0-7.4, pH of alkaline water 7-12, pH of acidic water 2-7.

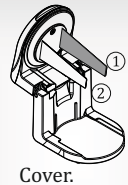
2. COMPONENTS

2.1.



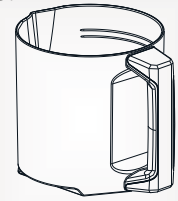
General view of the device

2.2.



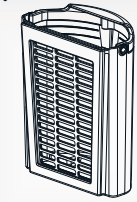
Cover.
① the dark electrode (anode) and
② the light electrode (cathode) are installed in it.

2.3.



Main receptacle

2.4.



Inner receptacle

2.5.

Membrane partition with grids

2.6.

Additional membrane partitions (2 pcs)

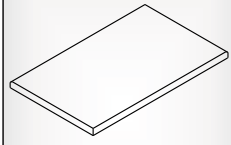
2.7.

The Cleaning solution of the light electrode (cathode), 100 ml

2.8.

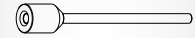
Specialised cloth for cleaning of the light electrode (cathode)

2.9.



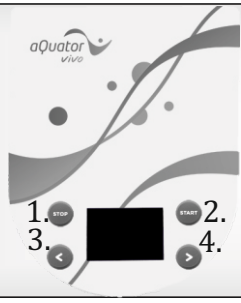
Specialised cloth for cleaning of silver electrode (for Silver models only)

2.10.



Silver electrode 99,99 % pure (for Silver models only)

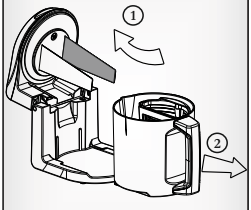
3. CONTROL PANEL



1. STOP ON/OFF — Turn on the device/Cancel/Go Back to previous menu/Turn off the device (press and hold for 2 sec.)
2. START — Choose/Start/Confirm
3. <
4. > — Navigation buttons

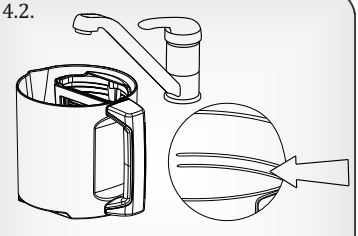
4. HOW TO USE THE DEVICE
PREPARATION OF IONISED WATER

4.1.



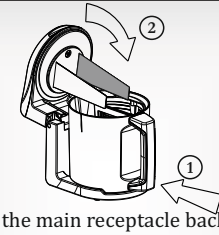
1. Open the cover.
2. Pull out main recepticle.

4.2.



First fill the inner receptacle and then fill the main receptacle with water. Make sure that water level is at the bottom water level mark.

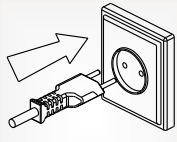
4.3.



1.Push the main receptacle back in its place. 2. Close the cover.
Note: during the ionisation process, acidic water will always be produced by dark electrode (anode) and alkaline water by light electrode (cathode).

Note: Make sure that the main receptacle is placed properly. It must be firmly pushed into its place all the way.

4.4.



Plug the device in.

4.5.

1. STOP ON/OFF — Use this button to turn on the device.
3. < — Use navigation buttons to select
4. > chosen setting.
2. START — Use this button to confirm the selection.

4.6.

Water with your chosen pH level is being prepared. White line at the bottom of the screen indicates ionisation process stage.

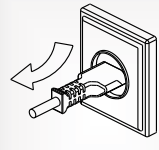
4.7.

Sound notification will be heard once the ionisation process is finished. Screen will indicate which receptacle contains water of your chosen pH level.

4.8.

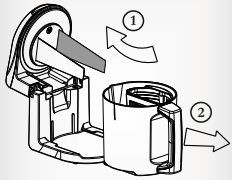
1. STOP ON/OFF — Use this button to turn off the device (press and hold for 2 sec.).

4.9.



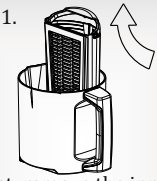
Unplug the device.

4.10.



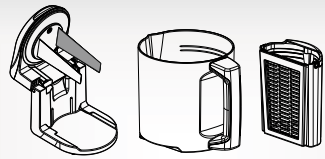
1. Open the cover.
2. Pull out main recepticle.

4.11.



First, remove the inner receptacle and pour out the water from it. Then, pour out the water from the main receptacle.

4.12.



Ionised water could be prepared multiple times in a row. When the water is ionised for the last time, make sure you leave the parts of ioniser to dry out separately. **Note:** Do not put back wet ioniser parts, unless you plan to make ionised water again.

Note: pour out the produced water when ionising it for the first time.

5. MENU SELECTION

For Daily Drink
pH 8.6

8.6 pH level water preparation.

For Food
pH 9.5

9.5 pH level water preparation.

Favourite pH

Favourite pH level water preparation
To change the Favourite pH value go to settings.

Settings

Changing of settings of the device (More information in Section 7 „Settings menu").

Manual pH selection

Manual selection of pH level in range of 2,4 - 11 pH.

Press this to confirm the selection.

To save selected pH level as your Favourite pH, press and hold this button for 2 sec.

Do you want to save this pH level?

Yes No

Use navigation buttons to confirm or cancel your choice.

For Disinfection
pH 4.5

4,5 pH level water preparation.

For Beauty
pH 5.5

5,5 pH level water preparation.

For Plants
pH 6.0

6.0 pH level water preparation.

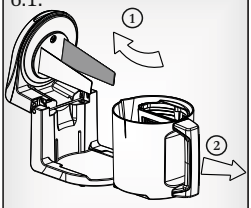
Table 1. **Ionised water ORP level**

Chosen pH level		Corresponding ORP level	Which receptacle contains water	
From	To		Inner	Main
ACIDIC WATER				
2.4	3.2	1200	✓	
3.4	4.2	900	✓	
4.4	5.2	800	✓	
5.4	6.2	750	✓	
6.4	6.8	650	✓	
ALKALINE WATER				
8.0	8.4	-150		✓
8.6	9.0	-250		✓
9.2	9.5	-450		✓
9.6	10.4	-850	✓	
10.6	11	-1000	✓	

Table 1 data is based on research results of the CENTER FOR PHYSICAL SCIENCES AND TECHNOLOGY with this device, using: temperature of +18°C, conductivity of 550 μS/cm and pH level of 7.4 tap water. pH and ORP values of the processed water may vary from the data presented above due to physical and chemical properties of the water used.

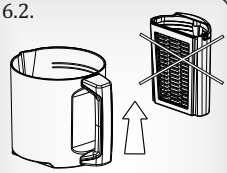
6. PREPARATION OF SILVER WATER (For model Silver only)

6.1.



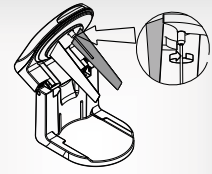
1. Open the cover.
2. Pull out main recepticle.

6.2.



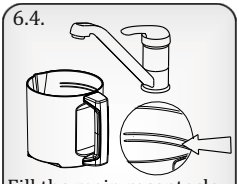
Remove the inner receptacle. The inner receptacle is not used in the silvering process.

6.3.



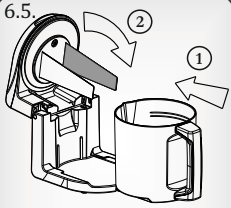
Plug (screw up) the silver electrode into the silver electrode socket at the underside of the cover between the dark electrode (anode) and the light electrode (cathode).

6.4.



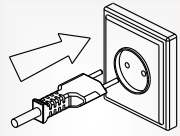
Fill the main receptacle with water. The water level should be at the bottom water level mark.

6.5.



1.Push the main receptacle back in its place. 2. Close the cover.

6.6.

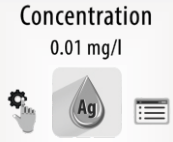


Plug the device in.

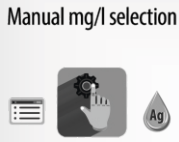
6.7.

1. (STOP ON/OFF) Use this button to turn on the device.
3. (<) Use navigation buttons to select
4. (>) chosen setting.
2. (START) Use this button to confirm the selection.

Note: Make sure that the main receptacle is placed properly. It must be firmly pushed into its place all the way.



Silver water (0,01mg/l) preparation.



Manual selection of silver water concentration.
When using tap water, choice is available between 0,01 mg/l to 20mg/l.
When using distilled water, choice is available between 0,01mg/l to 6mg/l.

Changing of settings of the device (More information in Section 7 „Settings menu").

6.8.

Water with your chosen silver water concentration is being prepared. White line at the bottom of the screen indicates silvering process stage.

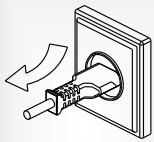
6.9.

Sound notification will be heard, once the silvering process is finished. „Silver water is ready" notification will appear on the screen.

6.10.

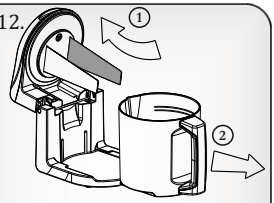
1. STOP ON/OFF — Use this button to turn off the device (press and hold for 2 sec.).

6.11.



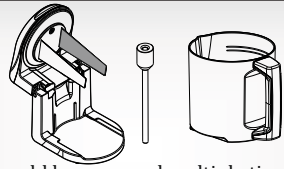
Unplug the device.

6.12.



1. Open the cover. 2. Pull out main recepticle. 3.Pour out the silver water into any non-transparent container.

6.13.



Silver water could be prepared multiple times in a row. When the water is ionised for the last time, make sure you leave the parts of ioniser to dry out separately.

Note: Do not put back wet ioniser parts, unless you plan to make ionised water again.

Note: pour out the produced water when ionising it for the first time.

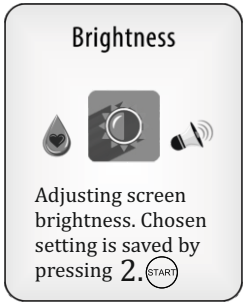
Note: If 110 V voltage electricity system is used - maximum concentrations are up to 11 mg/l with tap water and up to 3mg/l with distilled water.

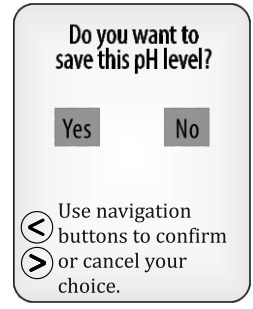
* According to the recommendations of the World Health Organization (ISBN 978-92-4-151369-2) silver concentration in drinking water should not exceed 0,01 mg/l.

Silver water concentration values are approved by CENTER FOR PHYSICAL SCIENCES AND TECHNOLOGY tests with the device. Distilled water (1-2 μS/cm) is used, if the silver water is used for drinking. If higher distillation level is used, higher variation in results is possible.

7. SETTINGS MENU

1. STOP ON/OFF — Use this button to turn on the device.
3. < 4. > — Use navigation buttons to select chosen setting.
2. START — Use this button to confirm the selection.





8. MAINTENANCE OF ELECTRODES

Note: Maintenance of electrodes must be done after the device is unplugged from the electricity socket.

Maintenance of the light electrode (cathode)

8.1.

After every use, spray the light electrode (cathode) with a cleaning solution, provided in the package (Section 2 "Components" of this instruction manual, image 2.7).

8.2.

After that, clean the light electrode (cathode) with specialised cloth, provided in the package (Section 2 "Components" of this instruction manual, image 2.8).

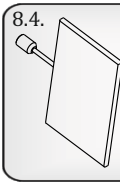
Maintenance of the dark electrode (anode)

8.3.

Do not clean the dark electrode (anode). Avoid mechanical damages.

Maintenance of the silver electrode

8.4.



After every use, clean the silver electrode with specialised cloth, provided in the package (Section 2 "Components" of this instruction manual, image 2.9). Then wash Silver electrode with water and leave to dry (For model Silver only).

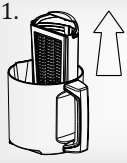
For warranty to be valid always use specialised cloths and cleaning solution provided by the manufacturer.

9. MAINTENANCE OF THE MEMBRANE PARTITION

Membrane partition has to be changed when you notice leaking water from it.
It is recmmended to change the membrane partition when it is completely dry.
Note: membrane partition has to be changed only when the device is unplugged from the electricity socket.

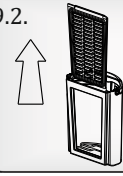
Changing of the membrane partition:

9.1.



Take the inner receptacle from the main receptacle.

9.2.



Hold the grids with both hands and remove them from the inner receptacle.

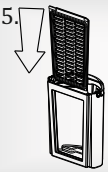
9.3.

Remove the used membrane partition.

9.4.

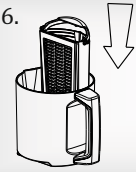
Insert a new membrane partition between the grids. Close the grids, so that the grid holes would match.

9.5.



Hold the grids pressed together using both hands and insert them into the inner receptacle. Push the grids all the way to the bottom.

9.6.



Place the inner receptacle back to the main receptacle.

For warranty to be valid always use membrane partitions provided by the manufacturer.

10. OPERATING MODES AND ERRORS

There is no water or water is not suitable for ionisation process due to low mineralisation or due to obsolete membrane partition.

Water is not suitable for ionisation process due to too high mineralisation.

Turn off and unplug the device. Place inner receptacle to the other side of the main receptacle.

Too much water in the device. Water level should be at the bottom level mark. If you do not make silver water, make sure silver electrode is unplugged from the silver electrode socket.

The device is not suitable to function non-stop for so long. Turn off the device and leave it to cool down.

The main receptacle is not properly placed and the cover cannot fully close. Make sure that the main receptacle is placed properly. It must be firmly pushed into its place all the way.

Not enough water in the main receptacle or silver electrode is not plugged in.

11.TECHNICAL SPECIFICATIONS

Parameters	Values
Capacity	3 l
Power supply voltage	110-230 V
AC frequency	60-50 Hz
Fuses	2 A
Silver electrode purity	99,99 %
Maximum power consumption:	
-Ionisation of water	320 W
- Silvering of water	10 W
Weight of the device does not exceed, kg	1,8 kg
Operating conditions:	
- Ambient temperature	From +5 ℃ to +40 ℃
-Relative air humidity	Up to 80% at +25 ℃
-Electrical conductivity of the water used	100 - 2000 µS/cm (64 – 1280 ppm)
-Initial temperature of the water used	Up to +25 ℃
-Waterproof rating	IP54
-Do not dispose of with common household waste	

12. SAFETY REQUIREMENTS

12.1. Do not:

12.1.1. open the cover and take out the main receptacle while the device is plugged into the electricity socket;

12.1.2. keep the device near an open flame or equipment that emits sparks;

12.1.3. disassemble the device;

12.1.4. wash the cover with water;

12.1.5. wash the device or its parts in a dishwasher;

12.1.6. use the device, if there are cracks or other mechanical damages;

12.1.7. use the device if the dark electrode (anode) is mechanically damaged;

12.1.8. use membrane partitions other than those supplied by the manufacturer of the device;

12.2. Keep the device away from children and do not leave it unattended.

13. WARRANTY

13.1. Warranty period: 24 months from the date of sale, if users comply with the requirements of this instruction manual.
13.2. If your device requires repair during the warranty period, deliver it to the store it was purchased from or to the manufacturer.
13.3. The warranty shall not apply if the device was damaged mechanically, the user attempted to disassemble, repair it or used it in a way that does not comply with the requirements of this instruction manual. Non-warranty repair can still be done if customer agrees to be charged for it.
13.4. LCD display (screen) warranty is applied only if 3 or more pixels are inactive.

Address of the enterprise:
UAB „Burbuliukas & Co“
Pušaloto st. 76, LT-35135, Panevėžys, Lithuania
Quality phone: +370 656 17906
Tel/fax.: +370 45 448329,
tel. +370 655 38445
E-mail: info@burbuliukas.lt
www.waterioniser.lt

WARRANTY'S INFORMATION

Sales date:	..... / ..... / ..... (year / month / day)
Stamp:	
Signature:	.....