

WATER IONISER

aQuator 

mod. CLASSIC, SILVER

CE
TECHNICAL DESCRIPTION
AND
USER MANUAL



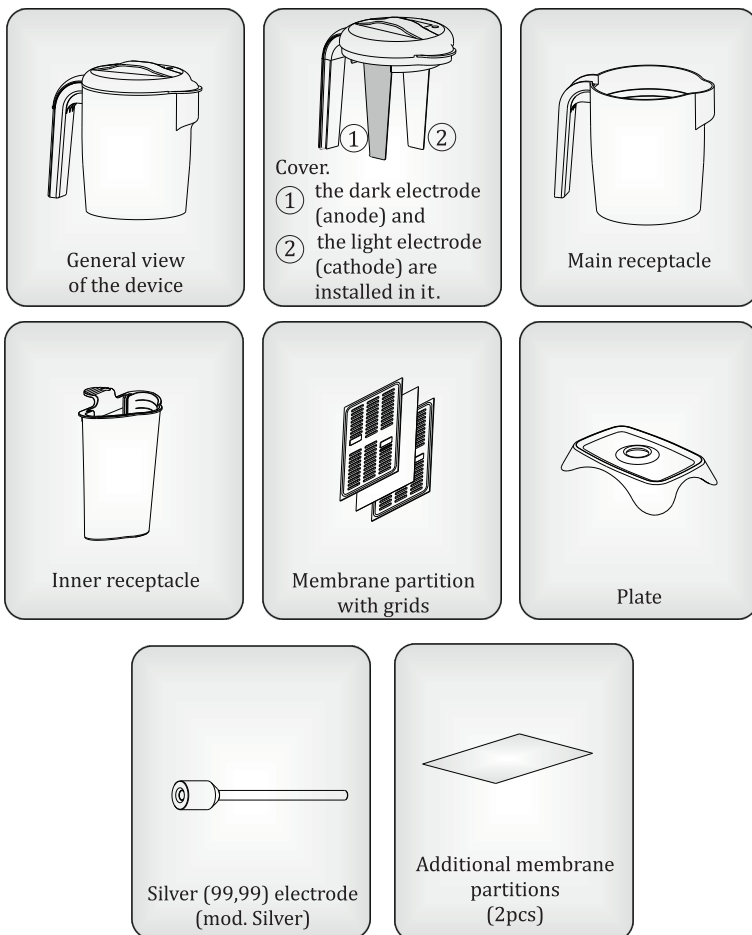
PATENT NO. 2002102394

1. GENERAL DEFINITIONS

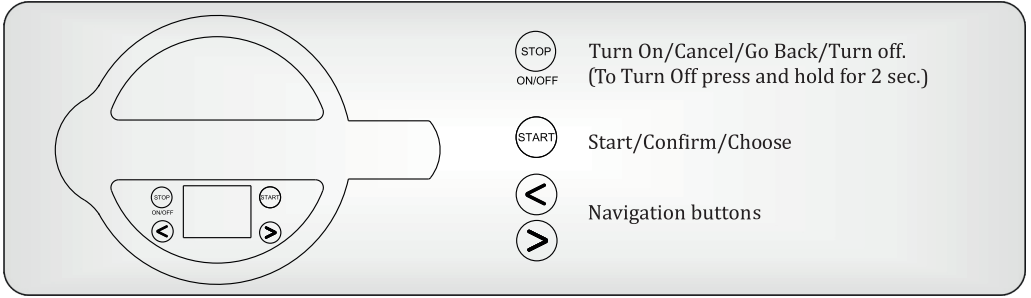
1.1. The following definitions are used in the instruction:

1. 1. 1. **Water ioniser** – is a household appliance, in which ionised or silvered water is produced by water electrolysis.
1. 1. 2. **Ionised water** – acidic or alkaline water, which is simultaneously obtained in separate containers of the water ioniser.
1. 1. 3. **Alkaline water (catholyte)** has a slight negative electrical charge and alkaline properties.
1. 1. 4. **Acidic water (anolyte)** has a slight positive electrical charge and acidic properties.
1. 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. 1. 6. **The dark electrode (anode)** is produced by using rare inert metals and oxide mixtures on the titanium base. This electrode has good electrochemical and physical-mechanical properties.
1. 1. 7. **Silvered water** is water containing silver ions. Concentration of silvered water is measured in milligrams per liter (mg/l).
1. 1. 8. Properties of ionised water are characterised by 2 indexes: **ORP** (oxidation reduction potential) and **pH** (hydrogen index). **ORP** is characterised by positive or negative charges (mV) that charge ionised water. **pH** values can fluctuate between 0 to 14 units. Potable water is neutral (**pH** is about 7.0-7,4). **pH** of alkaline water fluctuates from 7,0 to 12,0 while **pH** of acidic water is from 7 to 2.

2. COMPONENTS

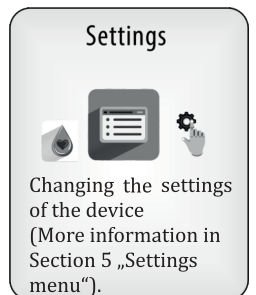
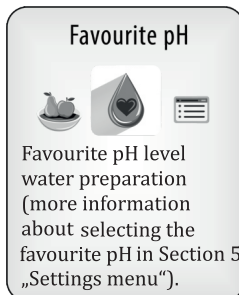
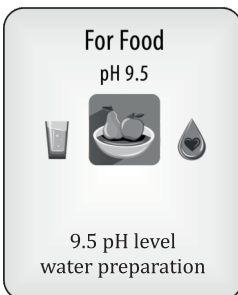
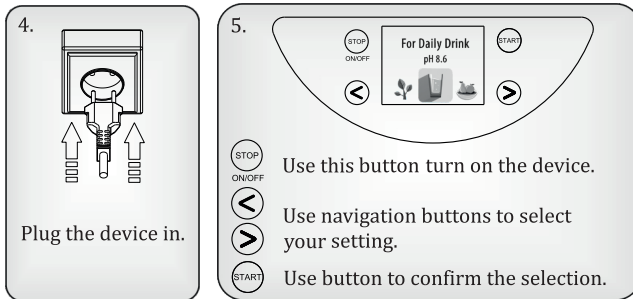
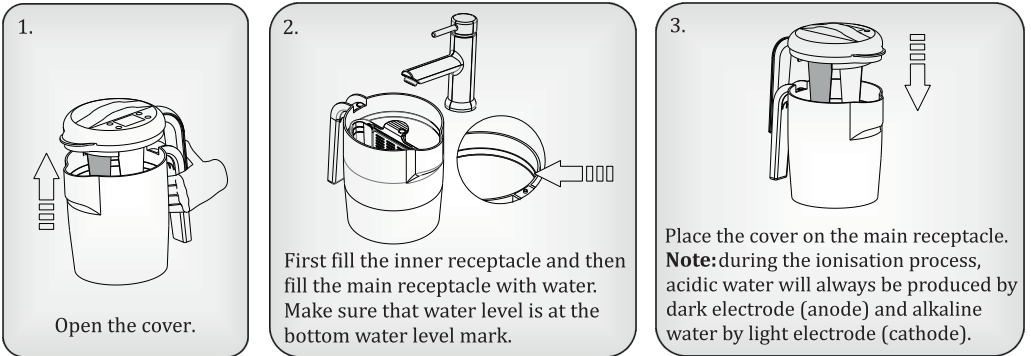


3. CONTROL PANEL





4. USING THE DEVICE



4.1. IONISATION OF WATER




Manual pH selection


Manual selection of pH level in range of 2.4-11 pH.

  Press to confirm the selection.




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

Do you want to save this pH level?

 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		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	✓	


This data is based on research results of the CENTER FOR PHYSICAL SCIENCES AND TECHNOLOGY with tap water: temperature of +18°C, conductivity of 550 µS/cm and pH level of 7.4. 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.




Water with your chosen pH level is being prepared. White line indicates ionisation process stage.

7.



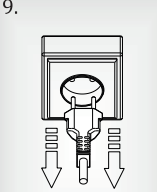
Sound notification will be heard once the ionisation process is finished. Screen will indicate which receptacle contains water of your chosen pH level.

8.



Use button to turn off the device (press and hold for 2 sec.).

9.



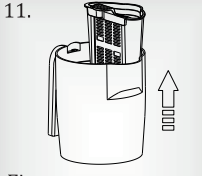
Unplug the device.

10.



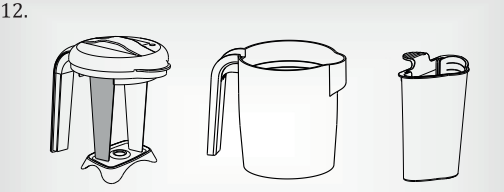
Remove the cover and place it on the plate as shown.

11.



First, remove water from the inner receptacle. Then, from the main receptacle.

12.

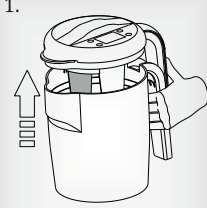


Leave the ioniser parts to dry.
Note: do not use the device until it is completely dry.

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

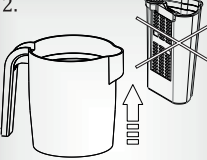
4.2. SILVERING OF WATER (mod. Silver)

1.



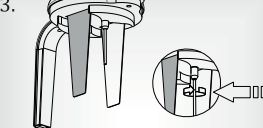
Open the cover.

2.




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

3.



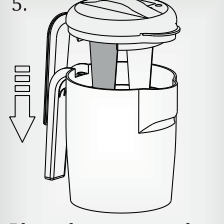
Plug the silver electrode into the silver electrode socket at the underside of the cover between the dark electrode (anode) and the light electrode (cathode).

4.



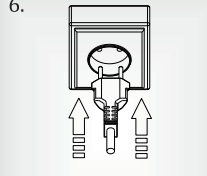
Fill the main receptacle with water. The water level should be at the bottom water level mark.

5.



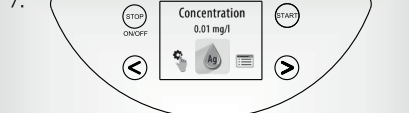
Place the cover on the main receptacle.

6.



Plug the device in.

7.




Use the button to turn on the device.

Use buttons to select your setting.


Use button to confirm the selection.

Concentration
0.01 mg/l




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

Manual mg/l selection




Manual selection of silver water concentration. When using tap water, choice is available between 0.02mg/l to 20mg/l. When using distilled purified water, choice is available between 0.02mg/l to 6 mg/l.

Settings




Changing settings the device (More information in Section 5 „Settings menu“).

8.



Water with your chosen silver water concentration is being prepared. White line indicates silvering process stage.


9.



Silver water is ready

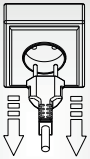
Sound notification will be heard, once the silvering process is finished. „Silver water is ready“ will appear on the screen.

10.




Use button to turn off the device (press and hold for 2 sec.).

11.



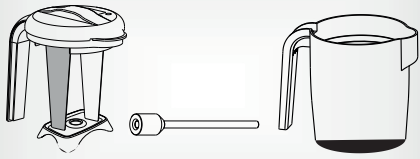
Unplug the device.

12.



Remove the cover and place it on the plate as shown. Pour the silvered water from the main receptacle into non-transparent container.

13.

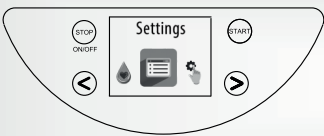


Leave the ioniser parts to dry.
Note: do not use the device until it is completely dry.

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

Based on the recommendations of the World Health Organization (WHO/SDE/WSH /03.04 / 14) silver concentration in drinking water should not exceed 0,1 mg/l. Silver water concentration values are approved by tests made in CENTER FOR PHYSICAL SCIENCES AND TECHNOLOGY. Distilled/purified water (1-2 µS/cm) is used, if the silver water will be used for drinking. Higher inaccuracy is possible when using higher distillation/purification water.






5. SETTINGS MENU



Use the „Turn on/off/stop/cancel“ button to turn on the device.

Use navigation buttons to select the “Settings” menu.

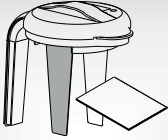
Use button to confirm the selection.

<p>Brightness</p>  <p>Adjusting screen brightness. Press START to save chosen screen brightness.</p>	<p>Sound</p>  <p>Turn on/off sounds.</p>	<p>Electrode cleaned</p>  <p>Confirmation after cleaning the light electrode.</p>	<p>Have you cleaned the electrode?</p> <p>Yes No</p> <p>Use navigation buttons to confirm or cancel your choice.</p>
<p>Membrane partition changed</p>  <p>Confirmation after the membrane partition is changed.</p>	<p>Have you changed the membrane partition?</p> <p>Yes No</p> <p>Use navigation buttons to confirm or cancel your choice.</p>	<p>Favourite pH</p>  <p>Favourite pH selection. Press START to save chosen favourite pH level.</p>	<p>Do you want to save this pH level?</p> <p>Yes No</p> <p>Use navigation buttons to confirm or cancel your choice.</p>

6. 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).



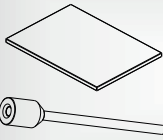
After every use, clean the light electrode with a soft cloth dampened with vinegar (9%), wash with water and leave to dry.

Maintenance of the dark electrode (anode).



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

Maintenance of the silver electrode.

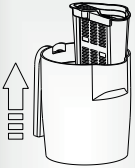


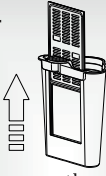
After every use, clean the silver electrode with soft cloth, wash with water and leave to dry.


7. MAINTENANCE OF THE MEMBRANE PARTITION


Note: membrane partition has to be changed only when the device is unplugged from the electricity socket.

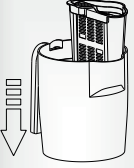
Changing of the membrane partition:

- 

1. Take the inner receptacle from the main receptacle and place it on a table.
- 





2. Remove the grid holder. Hold the grids with both hands and remove them from the inner receptacle.
- 

3. Remove the used membrane partition. Insert a new membrane partition between the grids. Close the grids aligning the grid holes.
- 

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

5. Place the inner receptacle back to the main receptacle.

8 . OPERATING MODES AND ERRORS

 <p>Low mineral content</p> <p>Not enough water or water is not suitable for ionisation process due to low mineralisation or due to obsolete membrane partition.</p>	 <p>High mineral content</p> <p>Water is not suitable for ionisation process because of too high mineralisation.</p>	 <p>Device overheated</p> <p>The device is not suitable to function non-stop for so long. Turn off the device and leave it to cool down.</p>	 <p>Close the Cover</p> <p>The cover has not been closed properly. Close the cover properly.</p>
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Move inner receptacle to the other side

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



Too much water

There is too much water in the device. The water level should be at the bottom level mark.



Apply silver electrode

Not enough water or silver electrode is not plugged in.

9. TECHNICAL REQUIREMENTS

Parameters	Values
Capacity	3 l
Power supply voltage	230 V
AC frequency	50 Hz
Fuses	2 A
Silver electrode	99,99
Maximum power consumption:	
- Ionisation of water	320 W
- Silvering of water	10 W
Weight of the device	1,2 kg
Operating conditions:	
- Ambient temperature	From +5 °C to +40 °C
- Relative air humidity	Up to 80% at +25 °C
- Electrical conductivity of the water used	100 - 2000 µS/cm (64-900 ppm)
- Initial temperature of the water used	Up to +25 °C
- IP rating	IP54
- Do not dispose of with common household waste	

10. SAFETY REQUIREMENTS

10. 1. Do not:

10. 1. 1. Remove the cover from the bottom receptacle when the device is plugged in.
10. 1. 2. Keep the device near an open flame or equipment that emits sparks.
10. 1. 3. Disassemble the device.
10. 1. 4. Leave the cover with the electrodes facing up.
10. 1. 5. Wash the cover with water.
10. 1. 6. Wash the device or its parts in a dishwasher.
10. 1. 7. Use the device, if there are cracks or other mechanical damages.
10. 1. 8. Use the device if the dark electrode (anode) is mechanically damaged.
10. 1. 9. Use membrane partitions other than those supplied by the manufacturer of the device.

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

11. WARRANTY

11.1. Warranty period: 24 months from the date of sale, if users comply with the requirements of this instruction manual.

11.2. If your device requires repair during the warranty period, deliver it to the store it was purchased from or to the manufacturer.

11.3. The warranty shall not apply if the device or its parts were 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.

11.4. LCD display (screen) warranty is applied only if 3 or more pixels are inactive.

Address of the enterprise:

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E-mail: info@burbuliukas.lt

www.warerioniser.lt

WARRANTY'S INFORMATION

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

