

AQUOLAB® BASIC



AQUOLAB® BASIC COMPONENTS' DESCRIPTION

- a Nozzles (4 per device included)
- b Nozzles' box (apart from the water jet)
- c ON/OFF button
- d Ozone activation and level selection button
- e Water pressure selection button
- f Push button to turn the water flow ON/OFF
- g Water jet handle
- h Tank (300 ml)
- i Tank cover
- j Reset button



The dental water jet Aquolab mixes water and ozone directly produced inside the device in order to give you a better hygiene and a more accurate cure of your mouth. The mechanical action of water along with the antiseptic action of ozone makes Aquolab a device that can guarantee a complete oral hygiene for all your family. In fact, ozone is able decompose bacteria and viruses in your mouth due to its specific chemical characteristics, preventing illnesses and infection in your oral cavity.

The device is not a toy. Children who use it must be under adult control. This device should not be used by children under 6 years of age and children till 10 years old need supervision while using it. Aquolab water jet use is recommended at least once a day, preferably in the evening after dinner.

Carefully read these instructions before using the device, focusing in particular on the rules for children. Any other use than the intended one constitutes an improper use. Therefore, the manufacturer cannot be held liable for any damage caused by an improper, incorrect and/or unreasonable use or if the device is connected to electrical installations which do not comply with safety regulations in force.

The water jet Aquolab is not suitable for use in pure oxygen-rich spaces or where there are flammable anaesthetic mixtures.

GENERAL RULES FOR A CORRECT ORAL HYGENE

After meals brush your teeth and then use Aquolab. Expert advise using toothbrushes an hour after meals.

The experts recommend that every kind of oral hygiene activity (using Aquolab water jet, a toothbrush, etc.) be done while sitting. According to them it helps have a more careful and complete treatment.

ACTIVATION

FΝ

- Place Aquolab on a horizontal plane.
- Connect the power supply charger to an easily accessible outlet.
- Connect to an electrical system constructed in accordance with the safety standards.
- Now your Aquolab Basic is ready.

ACCESSORIES

As standard equipment you will receive a case with four nozzles having different colours, three with 0.6 mm diameter and one with 0.8 mm diameter and a descaling solution blister (3 monouse vials)

Nozzles for periodic replacement are available at www.hygiene-precision.com both with 0.6 mm diameter and 0.8 mm diameter.

In the package you will also find the handle that is already correctly inserted into the device. This is a detachable part of the Aquolab dental water jet. In case of damage or if needed, it is possible to just replace the handle without having to replace the entire device.

HOW TO USE AQUOLAB®

- 1. When using for the first time or after a long period of inactivity, perform a vacuum cycle before using Aquolab
- 2. The device switches off automatically after 1min / 1.5min to prevent water-freeoperation
- 3. Fill the tank with water, about 300 ml.
- 4. Insert your personal nozzle into the handle.
- 5. Pushing ON/OFF button. (c) led will flash to remind you to verify if there is water in the tank (h). If water is in the tank you can proceed with point 6
- 6. To turn the water flow ON/OFF, press the dedicated button. (e)
- 7. To turn the ozone flow ON/OFF, press the dedicated button. (d)
- 8. Press the button activating the water flow. (f)
- 9. For children till 10 years old the 0.8 mm diameter nozzle is strongly recommended.
- 10. If you have high dentine sensitivity, use the 0.8 mm diameter nozzle.

HOW TO REGULATE WATER AND OZONE LEVELS

Once it has been connected to power supply, your device is ready to be used. As soon as the device is ON, the LEDs corresponding to the water and ozone regulation buttons will flash for 0.5 sec When they stop flashing, press the buttons (c.) and (d.) simultaneously (see Figure 1) for 2/3 sec. You can now set the water pressure level and the ozone quantity (points 6. and 7.). Both the water and the ozone level can be set by pressing the relative key and releasing it. At each release the level will increase by one and the LED will blink a number of times equal to the selected level.

N.B. : If you want to store the setting you have chosen, simply switch off and then on the machine again.

0.6 mm	Water Level 1	Water Level 2
Ozone Level 1	Children over 10 yearsi	Children over 10 years with teeth braces
Ozone Level 2	Adults with low dentine sensitivity	Adults
0.8 mm	Water Loval 1	Water Level 2
0.8 mm	Water Level 1	Water Level 2
0.8 mm Ozone Level 1	Water Level 1 Children under 10 years	Water Level 2 Children over 10 years with teeth braces

RECOMMENDATIONS FOR WATER AND OZONE LEVELS' CHOICE

Water Levels	Water Pump PWM	Flow Time-out	Ozone Levels	Air Pump PWM	Ozonator Voltage
1	75%	60 s	1	90%	12 V
2	100%	50 s	2	95%	12 V

These are just general recommendations. For specific needs contact our Customer Service www.hygiene-precision.com

ALARMS NOTIFICATION AND RESTORING

If a fault occurs during the operation the device stops the flow and signals the fault condition with a flashing LED alarm (j).

To restore normal operation, press the ON/OFF button (c). If the anomaly lasts, turn the device off and restart it. If the anomaly signal lasts the device is permanently damaged (contact the Customer Service).

IMPORTANT

Periodically check the condition of the external parts of Aquolab. If you notice that the device, the cables or the charger are damaged, the device cannot be used.

Please contact our Customer Service (www.hygiene-precision.com).Do not use the charger or cables if they are damaged.

Thanks to all the detachable parts of Aquolab, it is possible to replace just the damaged parts without having to change the entire device.

For any problems about the internal parts of Aquolab, it will itself warn you and in the user's manual you will find how to solve them. For any other question or problem you cannot handle check the user's manual or contact the Customer Service (www.hygiene-precision.com).

IMPORTANT WARNINGS

- Use only with the provided EM1024RE-24 power supply charger.
- Fill the tank with water. DO NOT use the device without water or if it fails to dispense water.
- Use fresh water (not stagnant) every time.
- Use water at room temperature only (avoid warm or cooled water).
- Use a different nozzle for each user.
- Its use is intended for oral cavity only.
- DO NOT use the device if its external parts or the charger are damaged.
- Use only for intended use
- Do not modify in any way
- Pay particular attention to the use by children to prevent possible strangulation with the power cord or handpiece tube

DIRECTIONS FOR ELECTROMAGNETIC COMPATIBILITY

Since Aquolab is an electro-medical product, you need pay attention to the following tables, in order to let the device operate safely in accordance with the information about electro-medical machines.

It is important to remember that portable and mobile radio communication can affect the device operation. It is recommended that any electro-medical device – therefore, including Aquolab – not be used near or stacked with other equipment.

The model "AQUOLAB BASIC" is intended for use in the electromagnetic environment specified below. The customer or the user of the "AQUOLAB BASIC" should assure that is used in such an environment.

Emission test	Compliance	Electromagnetic environmental - guidance	
RF Emission CISPR 11	Group 1	The model "AQUOLAB BASIC" uses RF energy only for its internal function. Therefore, its RF emission are very low and are not likely to cause any interference in nearly electronic equipments.	
RF Emission CISPR 11	Class B		
Harmonic emissions IEC 61000-3-2	Class A	The "AQUOLAB BASIC" is suitable for use in all establishments including domestic and those directly connected to the public low-voltage power supply network that	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Compliant	supplies buildings usea for domestic purposes.	

TABLE 2 - GUIDANCE AND MANUFACTURER'S DECLARATION - ELECTROMAGNETIC IMMUNITY

The model "AQUOLAB BASIC" is intended for use in the electromagnetic environment specified below. The customer or the user of the "AQUOLAB BASIC" should assure that is used in such an environment.			
Immunity test	IEC 60601-1-2 Test level	Compliance Level	Electromagnetic environmental - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	+/- 6kV contact +/- 8kV air	+/- 6kV contact +/- 8kV air	Floors should be wood, concrete or ceramic tile. If floor are covered with synthetic material, the relative humidity should be at least 30%.
Electric fast transient / burst IEC 61000-4-4	+/- 2kV for power supply	+/- 2kV for power supply	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	+/- 1kV differential mode	+/- 1kV differential mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variation on power supply input lines IEC 61000-4-11	<5% Ut (>95% dip in Ut) for 0.5 cycle 40% of Ut (60% dip in Ut) for 5 cycle 70% of Ut (30% dip in Ut) for 25 cycle <5% Ut (>95% dip in Ut) for 5 s	<5% Ut (>95% dip in Ut) for 0.5 cycle 40% of Ut (60% dip in Ut) for 5 cycle 70% of Ut (30% dip in Ut) for 25 cycle <5% Ut (>95% dip in Ut) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the "AQUOLAB BASIC" requires continued operation during power main interruption, it is recommended that the "AQUOLAB BASIC" be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	-

TABLE 4 - RECOMMENDED SEPARATION DISTANCES BETWEEN PORTABLE AND MOBILE RF COMMUNICATIONS EQUIPMENT AND THE "AQUOLAB BASIC"

The "AQUOLAB BASIC" is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the "AQUOLAB BASIC" can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the "AQUOLAB BASIC" as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter	Separation distance according to frequency of transmitter m			
	150 kHz to 80 MHz d = 1.2 P	80 MHz to 800 MHz d = 1.2 P	800 MHz to 2,5 GHz d = 2.3 P	
0,01	0,12	0,12	0,23	
0,1	0,38	0,38	0,73	
1	1,2	1,2	2,3	
10	3,8	3,8	7,3	
100	12	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

The model "AQUOLAB BASIC" is intended for use in the electromagnetic environment specified below. The customer or the user of the "AQUOLAB BASIC" should assure that is used in such an environment.

Immunity test	EN 60601-1-2 test level	Compliance level	Electromagnetic environmental – guidance
Conducted RF EN 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V rms 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any parts of the "AQUOLAB BASIC", included cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Radiated RF EN 61000-4-3	3 V/m 80 MHz ÷ 2.5GHz	3 V/m 80 MHz ÷ 2.5GHz	i d = 1.2 № 150KHz to 80 MHz Gecommended separation distance: d = 1.2 № 80MHz to 800 MHz Recommended separation distance: d = 1.2 № 80MHz to 800 MHz Recommended separation distance: d = 2.3 № 800MHz to 2.5GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacture and d is the recommended separation distance in meters (m). Field strengths from fixed transmitter, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the symbol: (())

AQUOLAB® BASIC MAINTENANCE

Disconnect the device from the supply mains before any maintenance activity

ORDINARY CLEANING

Dry the water tank (h) with a cloth after every use to prevent limestone scale.

ORDINARY REPLACEMENTS

It is recommended that the nozzles be replaced every 6-8 months.

ORDINARY MAINTENANCE - ANTI-SCALING TREATMENT

Aquolab Basic alerts you to the need for ordinary maintenance through the three LEDs simultaneously flashing. Be advised that at least once a month or when Aquolab will give you this signal, you will need to perform a decalcifying cycle using the specially designed Aqualab Decalcification Solution - which you can buy directly at www.aquolab.com The decalcifying cycle will allow you to remove deposits of calcium and magnesium salts present in the water; This operation will keep your Aquolab in constant efficiency. To avoid damaging the device, do not use products other than the Aquolab decalcification kit.

Follow these steps to correctly use the Aquolab De-scaling solution:

- Shake the vial before using it;
- Pour the content in the water dental jet tank and fill it with water;
- Switch the device on and let it dispense water for approximately 15 sec.;
- Wait 5 minutes and repeat this operation for a further 15 sec.;
- Repeat the operation till the tank is completely empty;
- Rinse the tank by filling it just with water and letting it pour out at regular intervals till the tank is completely empty.

To reset the 'Ordinary Maintenance' alarm and make Aquolab Basic ready to be used you need press the reset button again (see Figure 1).



EXTRAORDINARY MAINTENANCE – REPLACEMENT OF THE OZONE PRODUCER

The production of ozone lasts approximately 3 years (it may vary depending on the using cycles). In this case, the device will alert you to the need for 'Extraordinary Maintenance' through the LEDs sequentially flashing. The device must be sent back to the Customer Service so that the Ozone Producer can be replaced. It is not possible to independently reset the 'Extraordinary Maintenance' alarm and the device will be able to work again only after the Ozone Producer has been replaced.

HOW TO REPLACE THE DAMAGED HANDLE

Delicately remove the round lock securing the cable to the side of the water jet. Once the lock has been slackened, carefully detach the cable.

Change the handle and insert the cable. Then position the round lock so that the cable is adequately secured to the device.

IMPORTANT

- Always remember to empty the hydraulic circuit before a possible transport or a Long term storage
- If the device is returned for special maintenance, remove the handle and the interchangeable nozzles before returning.
- When replacing the handpiece, be very careful about its removal to avoid damaging the outlet fitting.
- These requirements are essential, Non-compliant returns may be refused.

DISPOSAL

Pay particular attention to regulations on waste sorting and disposal currently in force. The water jet must not be thrown away as household waste, but has to be handed over at authorized municipal landfills.

The external and replaceable parts of the water jet such as nozzles and handle can be normally recycled.

Manufacturer	EB2C srl - Via Savona 94 - 20144 Milano	
Model	Aquolab Basic	
Voltage supply	100-240V 50/60Hz 36W	
Class	П	
Applied part	Handle (type B)	
Weight	0,99 Kg	
Dimension	190mm x 140mm x h150mm	
Usage temperature +5°C ÷ +40°C		
Intermittent operation	on 3 min ON / 1 min OFF	
Transport temperature	-25°C ÷ +50°C	

TECHNICAL SPECIFICATIONS

Symbol	Meaning	
Ŕ	Type B applied part	
8	Obligation to read this user's manual	
CE	CE marking	
X	Obligation to do selective sorting	
\otimes	Do not reuse (disposable device – just for some handles)	
IP21	Protected against access with a finger to dangerous voltage parts Protected against the entry of vertical water drops	

EXPLANATION OF LABELLING SYMBOLS