

Instruction manual

BubbleBox

W0904 EN

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1 Safety

Read the instruction manual carefully before use.

This product information is intended exclusively for specialists with experience in installation and maintenance and specifically with the product described herein.

1.1 General understanding of safety

The product has been safely constructed and poses no danger if it is operated in a technically correct manner. Nevertheless, there are risks due to non-intended use that can be avoided by obeying the instructions in this instruction manual.

The non-compliance with the instruction manual can lead to accidents or personal injury, for which ROTAREX SOLUTIONS S.A. disclaims any and all liabilities.

Obey all instructions and warnings in this instruction manual when assembling, installing and operating this product.

1.2 Distributor obligations

The distributor of the product described herein must ensure the following:

- All warnings, instructions and product labels for end-users are the responsibility of the distributor
- Protection from unauthorized access
- Compliance with European and national regulations
- Awareness and comprehension of the product specifications of all affected personnel
- Avoidance of non-intended use
- When the product is installed, all warnings, instructions and product labels for the end-users are in the responsibility of the operator

1.3 Symbols used and their meanings

The warnings are scaled according to the severity of the respective hazard using warning symbols and signal words. You can identify warnings by their color coding or by their upper and lower separator lines.

The following warnings are used within the text:

	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.
	Indicates useful tips and recommendations as well as information for efficient and trouble-free operation.

2 Intended use

The BubbleBox is a water carbonation system for domestic use. The BubbleBox is an under-sink device which is installed in kitchen base cabinets and is connected to the high pressure hose of the cold water supply.

The BubbleBox must only be used in combination with an Aqua-Stop. A compatible Aqua-Stop can be purchased separately from us (refer to chapter 7).

Product repairs must only be performed by the manufacturer or with prior written consent of the manufacturer using only original spare parts.

The product is intended for EU countries. Without prior written permission from ROTAREX SOLUTIONS S.A. the product may not be used in any other country.

2.1 Non-intended use

	Danger due to non-intended use or faulty operation!
	The non-intended or faulty use of the BubbleBox poses a risk to the operator, the users, and to third parties which may lead to death or severe physical injury.

- The BubbleBox must only be used for the intended use specified in chapter 2.
- Use of the BubbleBox without Aqua-Stop.
- Retrofits and modifications are prohibited.
- All guarantees/warranties are void in the event of non-intended use.

3 Functional description

The BubbleBox is a device for adding carbon dioxide (food additive E 290) into tap water. The BubbleBox delivers still water up to sparkling water (medium). The concentration of carbon dioxide (food additive E 290) for tap water can individually be adjusted with the CO₂ regulator.

The BubbleBox is mechanically operated by the water pressure of the building and operates independent from a power supply.

The BubbleBox is a closed, self-cleaning system.

The solid plastic housing protects all components of the BubbleBox from dust and dirt and provides a safe support and protection for the suitable CO₂ high pressure cylinders.

3.1 Illustrations



Figure 3.1.1 BubbleBox W09040000

Legend			
①	Water outlet connection	⑤	CO ₂ regulator
②	Water inlet connection (not visible on the figure)	⑥	Adapter 71951XXXX for CO ₂ high pressure cylinder
③	Blue quick-release lever	⑦	Warning sticker
④	Child lock		

3.2 Marking

The products have the following marking:

W0XXXXXX	Article number
	Logo of the manufacturer
WW/YY	Week/year of production
XXXX	The last 4 digits of the batch number (WA)
Individual and additional marking is also possible.	

3.3 Variants of the BubbleBox

Article number	Water inlet connection	Water outlet connection
W09040000	John Guest Ø 8 mm	John Guest Ø 8 mm

4 Approvals

4.1 BubbleBox

Article number	Approvals	
	DVGW	DGUV
W09040000	—	X

5 Technical properties

5.1 BubbleBox

Water inlet connection	Refer to chapter 3.3
Water outlet connection	Refer to chapter 3.3
Safety valve	10 +1/-0 bar
Inlet pressure (water inlet)	min. 2 bar, max. 5 bar water pressure (static)
Maximum operating temperature range	0°C to +45°C
Operating medium	CO ₂ , tap water
Materials	
- BubbleBox - Inline carbonation nozzle - Pressure regulator, screws, seal holder, spindles - O-Rings - Spring	- Plastic - Plastic - Plastic and brass - EPDM - Stainless steel
Weight depending on variant	1 kg

6 Assembly and commissioning instruction



Before mounting, the following requirements must be met:

- The BubbleBox must not be connected to a low pressure hose (e.g. hose of hot-water boiler). Connect the BubbleBox only to the high pressure hose of the cold water supply.
- The BubbleBox must only be installed in frost-free rooms.
- The water pressure for the commissioning of the BubbleBox must be at least 2 bar, maximum 5 bar (dynamic pressure). If the water pressure is more than 5 bar, a pressure regulator must be installed.
- The tap water must comply with the strict requirements of the German Drinking Water Ordinance.
- Use suitable tools to avoid damage to the components during assembly.

6.1 Assembly of the BubbleBox



The BubbleBox must only be used in combination with an Aqua-Stop.

- Screw a screw in an inner sidewall of the kitchen base cabinet. The screw must be fixed at least 17 cm from the front of the cabinet and at least 50 cm from the bottom of the cabinet.
- Screw the screw up to a distance of 3 mm to the inner sidewall.
- Hang the BubbleBox onto the screw.
- Use a spirit level to align the BubbleBox vertically and fix it with a second screw.
- Stick the warning sticker ⑦ clearly visible on the BubbleBox.

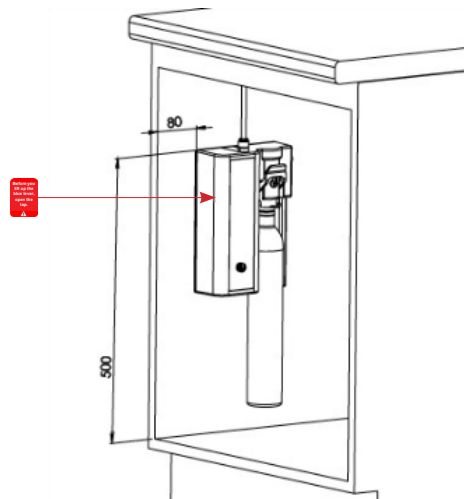


Figure 6.1.1 BubbleBox

- (6) Secure the water outlet connection ① and the water inlet connection ② at the BubbleBox with the pre-assembled safety clips.

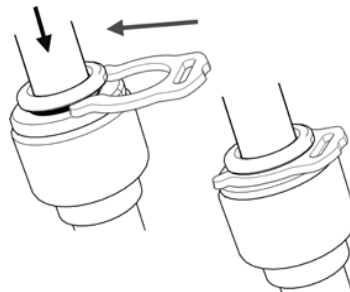


Figure 6.1.2 Safety clips

- (7) Turn off the stop valve. If no stop valve exists, close the main water stop valve. To check whether the correct stop valve is closed, open the tap at the sink. If no water flows, the correct stop valve is closed.

NOTICE

If an intervention into the water supply system of the building is required to operate the BubbleBox, qualified personnel, that has been approved according to local regulations, must be consulted. For further information contact your local water supplier.

- (8) Connect the high pressure hose of the cold water supply to the water inlet connection ② of the BubbleBox.
(9) Connect the cold water hose that leads to the tap to the water outlet connection ① of the BubbleBox.
(10) Screw the adapter 71951XXXX for CO₂ high pressure cylinder ⑥ hand-tight on a CO₂ high pressure cylinder.

NOTICE

Use only approved CO₂ high pressure cylinders (food additive E 290) with a maximum volume of 425 g. In case of a leakage the escaping carbon dioxide out of this high pressure cylinder size poses no danger, neither at ground level nor in small rooms.

- (11) Push the blue quick-release lever ③ in the position open. The lever of the child lock ④ must face downwards.



Figure 6.1.3 Quick-release lever in position open, the lever of the child lock is facing downwards



- (12) Insert the CO₂ high pressure cylinder (at a slight angle) into the holder of the BubbleBox.
- (13) Open the tap at the sink and allow at least 10 litres of water to run through. Just before closing the tap at the sink again, push the blue quick-release lever ③ to the position closed.



Figure 6.1.4 Quick-release lever in position closed, the lever of the child lock is closed

- (14) Turn the lever of the child lock ④ 180°, so that the blue quick-release lever ③ cannot be opened.
- (15) First open the stop valve and then the tap for cold water at the sink.

6.2 Commissioning of the BubbleBox



WARNING

Before the first commissioning, the entire system must be flushed thoroughly with tap water.

- (1) Open the child lock ④ and push the blue quick-release lever ③ to the position open (refer to figure 6.1.3).
- (2) Open the tap at the sink and allow at least 10 litres of water to run through. Just before closing the tap on the sink again, push the blue quick release lever ③ to the position closed (refer to figure 6.1.4).
- (3) Turn the lever of the child lock ④ 180°, so that the blue quick-release lever ③ cannot be opened.
- (4) Adjust your desired sparkling water intensity by turning the CO₂ regulator ⑤.

NOTICE

The higher the CO₂ regulator ⑤ is set, the higher the pitch of the hissing when tap water is flowing.

7 Aqua-Stop battery powered (714900032)

7.1 Illustration



Figure 7.1.1 Aqua-Stop battery powered (714900032)

This Aqua-Stop is not included in the delivery, but can be purchased separately from us.

7.2 Technical properties

Water inlet connection	3/8" female thread (union nut)
Water outlet connection	3/8" female thread
Working pressure	max. 6 bar
Cable length	1,5 m
Maximum operating temperature range	+1°C to +30°C
Operating medium	Tap water
Power supply	9 V DC alkaline battery
Materials	
• Body	• Plastic, brass, copper cable

7.3 Assembly and commissioning instruction of the Aqua-Stop battery powered (714900032)



DANGER The BubbleBox must only be used in combination with an Aqua-Stop.

- (1) Turn off the stop valve. If no stop valve exists, close the main water stop valve. To check whether the correct stop valve is closed, open the tap at the sink. If no water flows, the correct stop valve is closed.
- (2) Disconnect the high pressure hose of the cold water supply from the stop valve.
- (3) Put the particle filter, included in the delivery of the Aqua-Stop, together with a flat gasket between the thread of the Aqua-Stop and a 3/8" fitting and tighten them.
- (4) Connect the Aqua-Stop with a flat gasket to the stop valve.
- (5) Connect the Ø 8mm hose of the BubbleBox to the 3/8" fitting.
- (6) Insert now the 9 V DC alkaline battery into the plastic housing of the Aqua-Stop. An automatic self test starts after inserting the battery: an audio signal sounds and the LED indicators light up.
- (7) Press the button „check/reset“ on the plastic housing of the Aqua-Stop for 4 seconds.
The Aqua-stop opens and a long audio signal can be heard.
- (8) Place the plastic housing of the Aqua-Stop with its contacts facing downwards, on the floor as far as possible. The floor must not be electrically conductive. If the floor is electrically conductive, place a towel between the floor and the contacts of the Aqua-Stop. The Aqua-Stop is now ready for use. In case of a leakage, the Aqua-Stop closes and an audio signal will sound.
- (9) First open the stop valve and then the tap for cold water at the sink. Check all connections for tightness. In case of a leakage close the tap at the sink and the stop valve and check all connections and check if any gaskets are missing. Also check if all connections are properly tightened.
- (10) Press the button „check/reset“ on the plastic housing of the Aqua-Stop for 4 seconds.
The Aqua-stop opens and a long audio signal can be heard.
- (11) Again open the stop valve and then the tap for cold water at the sink. Check all connections for tightness.
- (12) If there are no leakages, the Aqua-Stop is ready for use.

8 Maintenance and cleaning

NOTICE

ROTAREX SOLUTIONS S.A. will not assume any liability for damages caused by repairs, replacement, normal wear and tear or for damages occurring in the course of ongoing maintenance work.

The maintenance is in accordance with ISO 22434.

8.1 Maintenance and cleaning of the BubbleBox

The components of the BubbleBox are maintenance-free.

NOTICE

- Discard the first 0,2 liters tap water every day.
- Clean the tap at the sink regularly according to the cleaning instructions of the tap manufacturer, so that drinking water in hygienic quality can be delivered.
- We recommend to close the stop valve, if the system is not used over a longer period of time (e.g. holidays). When re-using the system after a longer period of time, allow at least 10 litres of water to run through.

8.2 Maintenance and cleaning of the Aqua-Stop battery powered (714900032)

8.2.1 Particle filter

Clean the particle filter at regular intervals.

- (1) Turn off the stop valve. If no stop valve exists, close the main water stop valve. To the control whether the correct stop valve is closed, open the tap at the sink. If no water flows, the correct stop valve is closed.
- (2) Disconnect the 3/8" fitting from the Aqua-Stop and remove the particle filter.
- (3) Clean the particle filter with clean water. If the contamination cannot be removed, replace the particle filter.

8.2.2 Battery

When the voltage of the battery decreases, the Aqua-Stop does not close and an audio signal sounds and the red LED indicator „battery“ lights up. The battery must be replaced.

- (1) Remove the battery from the plastic housing of the Aqua-Stop. The battery must be disposed of properly.
- (2) Insert a new 9 V DC alkaline battery into the plastic housing of the Aqua-Stop. An automatic self test starts after inserting the battery: an audio signal sounds and the LED indicators light up.
- (3) Press the button „check/reset“ on the plastic housing of the Aqua-Stop for 4 seconds.
The Aqua-stop opens and a long audio signal can be heard.
- (4) Place the plastic housing of the Aqua-Stop with its contacts facing downwards, on the floor as far as possible.
The floor must not be electrically conductive. If the floor is electrically conductive, place a towel between the floor and the contacts of the Aqua-Stop. The Aqua-Stop is now ready for use. In case of a leakage, the Aqua-Stop closes and an audio signal will sound.

9 Product lifecycle

The product has an average life of 5 years when used according to its intended use in compliance with the prescribed temperature range (refer to chapter 5.1) and a relative humidity of 20% - 80%, and if it is used in non-corrosive environments, non-aggressive atmospheres and if it is not subjected to any vibrational and vibration stress and damages resulting from force majeure.

The product must be replaced after 10 years.

We recommend to perform a function test at least every year.

10 Disposal and recycling

The customer is responsible for the proper and environmentally compatible disposal of all waste arising in connection with the product.

At the end of its life, the product must be properly disposed according to national recycling regulations.

11 Malfunctioning

11.1 Malfunctioning BubbleBox

Malfunctions of the BubbleBox can be caused by contaminations which enter the water supply line from the CO₂ high pressure cylinder or due to faulty assembly. It is therefore imperative to ensure that only clean CO₂ high pressure cylinders are used and that the operating medium is not contaminated.

Further possible malfunctions:

Type of malfunction	Possible cause	Remedy
Tap water does not flow	Water supply line interrupted	Check the hoses for kinks.
No carbon dioxide	CO ₂ high pressure cylinder is empty or not correctly inserted into the holder. CO ₂ regulator is closed.	Replace the empty CO ₂ high pressure cylinder. Insert CO ₂ high pressure correctly into the holder. Open the CO ₂ regulator.
CO₂ escapes from the safety valve at the side of the BubbleBox	Water pressure more than 5 bar	Install a pressure regulator.
Sparkling tap water does not taste	Tap water contaminated	Install a prefilter.
Tap at the sink spits when sparkling water comes out	CO ₂ concentration adjusted too high or CO ₂ high pressure cylinder almost empty	Reduce the CO ₂ concentration at the CO ₂ regulator. Replace the empty CO ₂ high pressure cylinder.
Leakage of tap water	Faulty assembly of water inlet and water outlet hoses	Check the water inlet and outlet hoses and re-assemble them.

If the BubbleBox is still not working properly, contact your seller. The seller submits the claim to the manufacturer.

11.2 Malfunctioning Aqua-Stop battery powered (714900032)

Malfunctions of the Aqua-Stop can result from faulty assembly.

Further possible malfunctions:

Type of malfunction	Possible cause	Remedy
Tap water does not flow	Water supply line interrupted	Check the hoses for kinks. Open the stop valve. Open the Aqua-Stop by pressing the button „check/reset“ Check the flow direction.
Leakage of tap water	Inadequate seals Faulty assembly of the 3/8" fitting	Close the stop valve and check all threaded connections. Check if all gaskets are present. Check, if the 3/8" fitting is properly assembled.
Aqua-Stop LED indicator „battery“ lights	Empty battery	Replace the battery. Attention: do not use rechargeable batteries.

If the Aqua-Stop is still not working properly, contact your distribution partner. The distribution partner submits the claim to the manufacturer.

12 Guarantee and warranty

For guarantee and warranty refer to our general terms and conditions.

This instruction manual is an integral part of the sales contract and is subject to our general terms and conditions.

13 Revision history PG.G.04.004

Index	Modification number	Modification	Date	Checked / approved by
-	-	Initial version	2015/05/19	M. Mittasch
01		Revision of the entire document	2015/06/19	M. Mittasch
02		Change header and footer	2016/01/21	M. Mittasch
03		Revision of the entire document	2016/02/24	M. Mittasch
d		Change to Rotarex Solutions, revision of the entire document	2017/11/28	M. Mittasch