

columbia.  
aqua  
*Juman*

**TECHNICAL/USER MANUAL  
AND SERVICE BOOK**



# USER MANUAL

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# TECHNICAL MANUAL

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# TECHNICAL SHEET

## 0. MAIN FEATURES

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**DIRECT ACCESS**  
EASY OF ACCESS AND  
MAINTENANCE



**COLUMBIA FILTERS**  
EXCLUSIVE FILTERS  
MAXIMUM SAFETY AND HYGIENE



**COLUMBIA MEMBRANE**  
MAXIMUM HYGIENE



**CLICK**  
QUICK CONNECTIONS  
AND MAXIMUM SECURITY



**PRESSURE PUMP**  
INCREASED PRODUCTION AND  
PERFORMANCE



**SOLENOID VALVE**  
IMMEDIATE CONTROL



**REVERSE OSMOSIS**  
EQUIPMENT WITH REVERSE  
OSMOSIS SYSTEM AND PUMP



**AMBIENT WATER**  
PRODUCTION  
AT AMBIENT TEMPERATURE



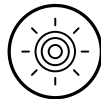
**COLD**  
PRODUCTION OF  
COL WATER



**HOT**  
PRODUCTION OF  
HOT WATER



**SPARKLING**  
WATER PRODUCTION  
WITH GAS



**LED**  
INFORMATION SYSTEM  
MULTIFUNCTION BY LED



**SAFE**  
SECURITY SYSTEM FOR  
HOT WATER



*Please retain this manual, which includes the service and warranty sections, so that we can provide you with better after-sales service.*

## **SAFETY INSTRUCTIONS**

The following are safety warnings and instructions to prevent injury to the user and damage to the surroundings. However, it is important to take the necessary precautions and proceed with care during installation, maintenance, cleaning and operation of the appliance.

### **Children/Adults/Pets**

Children and other persons who are not aware of the risks involved in using the appliance may be injured or their lives may be put at risk. Therefore, please note:

- The appliance may not be used by children under 8 years of age or by persons with reduced physical, sensory or mental capabilities, nor by persons lacking experience or knowledge, unless they have been supervised or given instructions on how to use the appliance safely and have understood the potential risks of using it.
- Children should not play with this appliance.
- Do not allow children to clean or maintain the appliance without supervision.

### **Warning: Choking Hazard!**

Do not allow children to play with the packaging/plastic or any parts of the packaging, as they may become entangled or cover their heads with them and suffocate.

Keep packaging, plastics and packaging parts out of the reach of children.

### **Assembly. Warning.**

Risk of electric shock/fire/material damage/damage to the device!

If the appliance is not installed correctly, it may lead to dangerous circumstances. Make sure that the following conditions are met:

- The mains voltage at the power outlet must correspond to the nominal voltage specified on the appliance (data plate).
- The mains plug and the socket with protective contact must match and the earthing system must be correctly installed.
- The installation must have an adequate cross section.

The mains socket must be accessible at all times. If this is not possible, a switch (double pole switch) must be permanently integrated into the installation in accordance with the regulations on electrical installations in order to comply with the relevant safety regulations.

If the power cord of the appliance is modified or damaged, it may cause electric shock, short circuit or fire due to excessive heating.

The power cable must not be bent, crushed or modified, nor must it come into contact with heat sources.

The use of extension cords or power strips could cause a fire due to excessive heating or a short circuit.

Connect the appliance directly to a properly installed and grounded socket. Do not use extension cords, power strips or multiple connectors.

**Warning. Risk of injury!**

- The appliance is very heavy. Lifting it could cause injury. Always lift the appliance with assistance.
- If the hoses and power cables are not routed correctly, there is a risk of disconnection, which could cause injury.

Route hoses and cables so that there is no risk of disconnection.

**Attention! Risk of material damage/damage to the device**

- If the water pressure is too high or too low, the appliance may not operate properly. In addition, material damage or damage to the appliance may occur. Make sure that the water pressure in the water supply system is at least 100 kPa (1 bar) and does not exceed 500 kPa (5 bar).
- Modifying or damaging the water tubes may cause material damage or damage to the appliance. The water tubes must not be bent, crushed, modified or cut.

- Using hoses distributed by other brands to connect the water supply could cause material damage or damage to the appliance. Use only the hoses supplied with the appliance or original replacement hoses.

**Cleaning/maintenance**

**Warning: Risk of death!**

The appliance is powered by electricity. There is a risk of electric shock if you touch live components. Therefore, please note:

- Switch off the appliance. Disconnect the appliance from the mains (pull out the plug).
- Never hold the main electric plug with wet hands.
- When disconnecting the plug from the socket, always hold the plug itself and never the power cable, as this could damage it.
- Do not make technical modifications to the device or its components. Any repairs or other work required on the appliance must be carried out by our technical service or by an electrician. The same applies to replacing the power cable (if necessary).
- Replacement network cables can be ordered by contacting our technical service.

**This appliance is intended for use in domestic and similar applications.**

- Personal kitchen areas in stores, offices and other work environments.
- Rural and client accommodation in hotels, motels and other residential environments.
- Bed and breakfast type environments.
- Catering services and similar non-retail applications.

Technical info:  
[wtreatmentresources.com/796797-796798.html](http://wtreatmentresources.com/796797-796798.html)



## 1. UNPACKING

It is important that before installation and start-up, you check the box and condition of the equipment, in order to ensure that it has not been damaged during transport.

**!** **Attention: Claims for damages during the transport must be submitted together with the delivery note or invoice to your distributor, attaching the name of the carrier within a maximum period of 24 hours after receipt of the merchandise.**

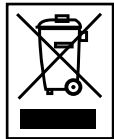
Remove the equipment and accessories from their cardboard packaging, removing the corresponding protections.

**!** **Attention: Dispose of properly and keep out of reach of children. Keep plastic bags out of the reach of children, as they can be dangerous for them.**

Inside you will find (depending on the model): Water treatment equipment, installation accessories and documentation.

The materials used in packaging are recyclable and must be disposed of in the appropriate selective collection containers or at the local center specifically for the recovery of waste materials.

This product cannot be disposed of with household waste, urban waste. When the equipment's useful life has ended, it must be returned to the company or center where the appliance was purchased, or to a Clean Point or local center specifically for the recovery of materials, indicating that it has electrical and electronic components and refrigerant gas. The correct collection and treatment of unusable devices helps to preserve natural resources and also to avoid potential risks to public health.



## 2. INTRODUCTION

This manual describes the features of the Juman versions with sparkling water (grey model) and Juman without sparkling water (white model). If in doubt, consult your dealer.

JUMAN systems include 1 sediment and activated carbon filtration cartridge, and another cartridge with a reverse osmosis membrane with a carbon post-filter.

Congratulations! You have purchased one of the best water treatment equipment available on the market for office use.

This equipment will help you improve the characteristics of your water, providing you with top quality, low mineralisation water.

Your team will provide you with different benefits and advantages:

- It is a physical system that does not use or add chemicals to the water.
- Provides high water quality.
- It has a low maintenance cost.
- Ensures high production.

## 3. TYPES OF TREATMENTS

The Columbia Aqua Juman fountains have a reverse osmosis water treatment system.

### 3.1 What is filtration?

#### **Sediment and activated carbon filter.**

Filtration is the process of separating suspended solids from water through a porous medium, also called a filter. Water passes through the pores of the filter, but particles larger than the pores of the filter are retained, resulting in clearer water. Columbia Fountains incorporate 5µm filters.

Activated carbon is used to remove chlorine from water, as well as improve taste, odor and eliminate some organic components thanks to its great capacity as an adsorbent.

### 3.3 What is osmosis?

Natural or direct osmosis is the most common in nature, since semipermeable membranes are part of the vast majority of organisms (for example, plant roots, organs of our own body, cell membranes, etc.)

When two solutions with different salt concentrations are separated by a semi-permeable membrane, a natural flow of water occurs from the solution with the lower concentration to the one with the higher concentration. This flow continues until the concentrations on both sides of the membrane are equal.

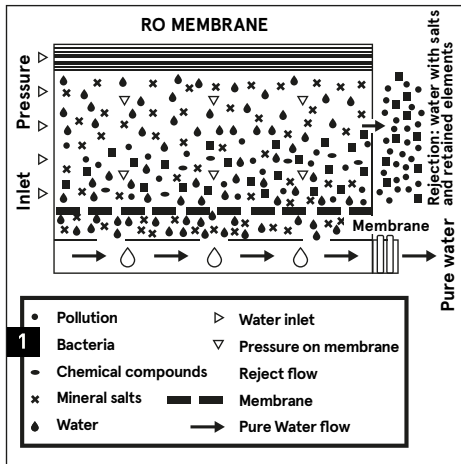
When trying to reverse this process and obtain a flow of water with a lower salt concentration from one with a higher concentration, sufficient pressure must be applied to the membrane from the water with a higher concentration to overcome the natural tendency and flow of the system.

This process is what we call reverse osmosis. Today, reverse osmosis is one of the best methods to improve the characteristics of water, using a physical system (without using chemicals).

The water to be purified exerts pressure on the semi-permeable membrane, so that part of it will get



Pass through the pores of the membrane (osmosis water), while the rest of the water (rejected or with a high salt concentration) will be diverted to the drain (Fig. 1).



#### 4. PREVIOUS WARNINGS

##### Warning

- These appliances are supplied with refrigerant gas, ISOBUTANE (R-600a), which is a natural gas with no harmful effects on the environment, but is flammable.

- The appliance must be transported and moved with the utmost care to ensure that it is not subjected to excessive impacts or shocks. Failure to comply with this rule could put the appliance out of service.

- Keep the ventilation openings of the appliance or built-in structure free from obstructions.



- Do not damage the cooling circuit. If the cooling circuit is damaged, with possible leakage of refrigerant gas, it could create explosion risks caused by sparks or external flames.

- Under no circumstances operate your appliance if it appears to be damaged.

- In the event of a breakdown, contact your Technical Service, ventilate the room where the appliance is located and avoid open flames or work on the appliance.

- For recycling, please contact your local waste disposal service or the seller. The appliance must be transported without damaging the cooling circuit.

- This appliance is intended for use in domestic and similar applications such as staff kitchen areas in shops, offices and other working environments; rural accommodation and by customers in hotels, motels and other residential-type environments; bed and breakfast-type

environments; food service and similar non-retail applications.

**!** Attention: Please read this manual carefully and retain it before installing and starting up the equipment. If you have any questions about the installation, use or maintenance of this equipment, please contact your distributor's technical assistance service.

**!** Attention: These devices are NOT water purifiers. If the water to be treated comes from a public supply (and therefore complies with current legislation), these devices will substantially improve the quality of the water. Otherwise, a physical-chemical and bacteriological analysis of the water will be necessary in order to ensure its purity correct purification by applying the appropriate techniques and equipment for each need, PRIOR TO INSTALLING the equipment. Contact your distributor so that they can advise you on the most appropriate treatment for your case.

Water treatment equipment needs a periodic maintenance carried out by qualified technical personnel in order to guarantee the quality of the water produced and supplied.

It is important that before installation and start-up, you check the box and condition of the equipment, in order to ensure that it has not been damaged during transport.

##### 4.1 Conditions for the correct operation of the equipment

- The equipment must not be supplied with hot water ( $T > 40^{\circ}\text{C}$ ).
- The ambient temperature should be between  $4^{\circ}$  and  $45^{\circ}\text{C}$ .
- If the network pressure is higher than 2.5 bar, a pressure regulator must be installed before the water enters the equipment, calibrated to a maximum pressure of 2.5 bar.
- For waters with salinities greater than 2000 ppm consult your distributor.
- It is recommended that the water to be treated be dechlorinated or have a maximum hardness of  $15^{\circ}\text{dH}$  in order to obtain optimal performance of the equipment.
- If the water to be treated has a hardness greater than  $15^{\circ}\text{dH}$ , this could lead to a reduction in the life of the membrane and in the performance of the equipment.
- **In case the water to be treated contains:**
  - High concentrations of iron and manganese (Greater than 1 pp, measured in the machine reject).
  - Hyperchlorination prolonged over time.
  - Sludge or turbidity greater than 3 NTU.
  - A nitrate concentration greater than 100 ppm.
  - A sulphate concentration greater than 250 ppm.
- Contact your distributor so they can recommend the most suitable pre-treatment for your case, to ensure the correct operation of the equipment, avoid damage to components and guarantee the quality of the water supplied.

## 4.2 Pre-installation warnings

- If the installation of the home or business needs to be adapted to be able to install the equipment in the intended location, this must be done in accordance with national standards for indoor installations of water and electrical supplies.
- COLUMBIA devices require an electrical outlet within 1 meter of the unit.
- COLUMBIA equipment must not be installed lying down or tilted. It must be placed on a flat surface for correct and safe operation.
- The intended installation location must have sufficient space for the appliance itself, its accessories, connections and for easy maintenance.
- Maintain a minimum separation of 10 cm on the sides and back wall to ensure proper ventilation of the equipment.
- Under no circumstances will the equipment be installed outdoors.

**!** **ATTENTION: The equipment must not be connected to the electrical current directly, it must be left to rest for 2 hours once it has been placed in the desired installation position. This is very important to ensure proper operation of the system, otherwise the compressor could be damaged. The manufacturer will not be liable for any damage caused to the equipment in this case.**

## 4.3. Equipment usage warnings

- When you are going to be away for more than a week, close the water inlet valve to the appliance, empty it and disconnect it from the power supply. When you return, connect the power supply to the appliance, open the inlet valve and empty the storage tank twice before using water.

**!** **Attention: After a prolonged period (more than one month) in which the equipment has not been working or producing water, contact your dealer in order to carry out proper cleaning and maintenance.**

**!** **Attention: Particular attention must be paid to cleaning and hygiene of the front dispensers, on a regular basis and especially when carrying out periodic maintenance and sanitization. To do so, use the sanitizing spray and disposable absorbent paper (See the Sanitizing chapter).**

**!** **Attention: The water provided by osmosis equipment is LOW MINERALIZATION. The mineral salts that the human body needs are mainly provided by food, and to a lesser extent by drinking water.**

## 5. EQUIPMENT OPERATION

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### 5.1 How to extract water from your dispenser

See Chapter 15 (How to draw water) of the Technical Manual to identify the dispensers and learn how to draw water.

### 5.2 Use of management and control components

See Chapter 14 (Component Identification) of the Technical Manual to identify and understand how the management and control components work.

### 5.3 Basic system operation

The mains water to be treated enters the equipment through the turbidity and carbon filter. During this filtration stage, suspended particles, chlorine, its derivatives and other organic substances are retained.

After the filtration stage, the water is forced towards the reverse osmosis membrane. The pressure of the water on the membrane makes the reverse osmosis process possible.

The water then passes through a post-filter whose purpose is to eliminate possible odors and flavors.

Rejected water or water with excess salts and other dissolved substances is directed towards the drain for disposal.

When water is requested by pressing the front dispensers of the equipment, the water accumulated in the cold, hot and reserve water tanks (depending on the model) flows towards the outlet nozzles.

**!** **Attention: There are slight variations in operation depending on the model. Read the corresponding section of the Technical Manual.**

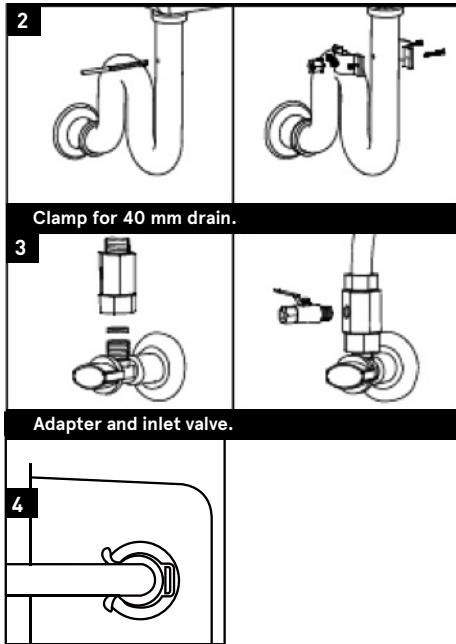
## 6. INSTALLATION

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The installation of your Columbia Fountain must be carried out by qualified personnel. Consult your dealer if in doubt.

**!** **Attention: Since the appliance to be installed improves the quality of the water to be consumed, all tools used for assembly and installation must be clean and under no circumstances may they be contaminated or impregnated with grease, oil or rust. Use tools exclusively for cutting pipes, handling the membrane, etc.**

**!** **Attention: The work must be carried out with an appropriate attitude and hygienic conditions, taking extreme precautions in everything related to materials and components that will be in contact with the water to be treated or consumed.**



**!** Attention: Avoid the risk of external contamination of the equipment due to improper handling by using gloves, hand sanitizer gel or washing your hands as many times as necessary during the installation, start-up and maintenance of the equipment.

**!** Install the drain collar (image 2) and inlet adapter (image 3) and connect them to the respective IN and OUT/DRAIN connectors on the RO version only (image 4).

The drain pipe can be directed upwards vertically for a maximum of 2.5 meters and another 5 meters horizontally.

**!** Attention: Some of the installation accessories may vary depending on the model and region in which the equipment is distributed.

Use appropriate tools and sealants to ensure tight connections.

## 7. RINSING THE CARBON FILTERS

When you plug it into the power and supply water for the first time, the equipment will start an automatic rinsing for 5 minutes and production for 10 minutes.

Make sure that the water is reaching the equipment correctly. It is necessary to rinse the equipment and discard the first production deposits of the equipment, in order to eliminate the remains of carbon dust and preservative from the reverse osmosis membrane. To do this, once the equipment is installed and in operation, simply empty the equipment tanks twice for each type of water until the equipment runs out of water.

## 8. CHECKING SYSTEM TIGHTNESS, START AND STOP (RO)

Keep the inlet valve open and keep the equipment powered by electricity, performing a visual inspection of the system to ensure that there are no leaks (for approximately 1 minute).

## 9. CLEANING AND MAINTENANCE

### 9.1 Cleaning the equipment

- Always unplug the equipment from the power supply before cleaning the equipment.
- Clean the exterior surfaces of the equipment with a cloth moistened with water and neutral soap.
- Never use detergent or chemicals.
- Do not spray water directly on the surface of the equipment.
- If the condenser accumulates dust or other unknown substances, clean it with a cloth moistened with water and neutral soap.
- After cleaning the equipment, dry it completely before plugging it into the power supply.
- Empty the drip tray daily.

### 9.2 Mantenimiento del tratamiento de agua

**!** Attention: Some components of your equipment, such as pre-filters and membrane, are consumables that have a limited lifespan.

The duration will depend on the quality of the local water, consumption, type of use and specific aspects of the water to be treated such as extreme turbidity, high chlorination, excess iron.

**!** Attention: In order to ensure the quality of the water supplied by your equipment, periodic maintenance must be performed.

| Recommended maintenance  |
|--|
| <ul style="list-style-type: none"> <li>• <b>Prefilter:</b> At least every 12 months*</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Osmosis Membrane:</b> Every 3 years approx. (for soft water to be treated (hardness &gt;15°HF))</li> </ul>   |
| <ul style="list-style-type: none"> <li>• <b>Sanitization:</b> At start-up. At least every 12 months depending on use. Every time components in contact with water are accessed or are not has consumed water for more than a month.</li> </ul> |

\* Depending on the intended use and characteristics of the water to be treated.

Maintenance must be carried out by trained personnel, who must handle the equipment appropriately, as well as use original spare parts to maintain the characteristics, warranty, certifications and performance of the equipment and thus preserve the quality of the water dispensed.

**!** **Attention: The use of non-original spare parts, installation outside the operating limits and start-up, improper maintenance or use, may lead to the loss of the warranty, as well as the invalidation of the certifications to which the equipment has been subjected.**

An excess of any compound (total chlorine, turbidity, hardness, etc.) can cause a reduction in the life of filters and certain components. These maintenance procedures are indicative.

**!** **Attention: All consumables are supplied with individual packaging specially designed to ensure hygienic storage and transport conditions. Take extremely hygienic precautions after removing consumables from their packaging and when handling the various connectors and components.**

**!** **Attention: Before dismantling the equipment, prepare all the material you will need to carry out maintenance operations and the space required for this. Work in a well-lit area, in suitable hygienic conditions and with enough space to carry out the operations comfortably.**

Change the filters appropriately, depending on the equipment model and filter type. Ensure that the joints are tight and the system is in the original hydraulic configuration. See the Technical Manual for the filters required according to your equipment model and how to access the filters.

Sanitize the equipment following the instructions described in the Sanitization Procedure.

**!** **Attention: If you detect that the water dispensed does not comply with current national legislation, close the equipment inlet valve, empty it through the tap, disconnect it electrically and contact your technical service.**

## 10. HYGIENIZATION PROCEDURE

Necessary material:

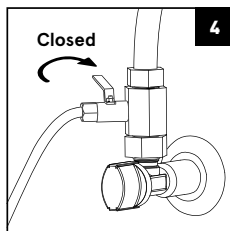
- Manual valve.
- Measuring cup with connectors.
- Hydrogen peroxide (0.5 l). (sanitizing product)
- Single-use vinyl gloves.
- Hydrogen peroxide detection strips.
- Sanitizing spray. (Hydrogen peroxide)
- Paper napkin.

Perform equipment sanitization during start-up, when appropriate (whenever there is a risk of equipment contamination due to handling components in contact with water) or at the indicated intervals.

To do this, follow the steps below:

**!** **Attention: The water used during sanitation must be drinking water (from a public distribution network complying with the corresponding potability requirements).**

- Keep the inlet valve closed (4) and empty the accumulation tank through the front dispensers (see chapter "how to extract water").



- Sanitization must be carried out with the new pre-filters and post-filters installed and previously rinsed appropriately, correctly removing the carbon dust from them.

- Use single-use vinyl gloves to handle sanitizing products.

### 10.1 Cleaning of prefilters and membrane

Insert the measuring cup into the inlet tube to the equipment.

To do this:

- Disconnect the inlet pipe to the equipment marked "IN", and insert the dosing cup between the stopcock and the water inlet of the equipment (5). For greater comfort and ease of access during sanitization and opening and closing operations of the inlet valve, you can insert a manual valve in the closed position along with the sanitizing dosing cup, which will perform the same functions as the inlet stopcock to the equipment.

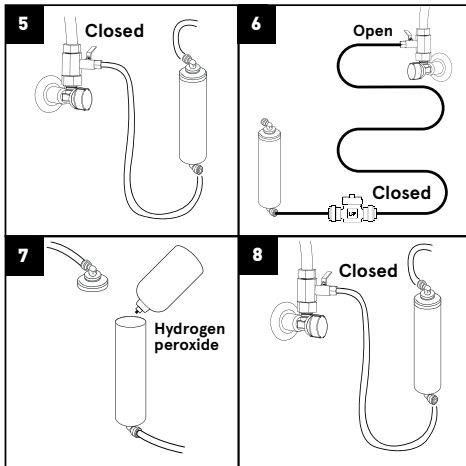
- Once the assembly is installed, keep the new inlet valve closed and open the inlet stopcock (6). The measuring cup must initially be empty.
- Pour 100 ml of sanitizing product into the measuring cup placed at the inlet of the equipment (7). Screw the cup correctly onto its head.
- In RO models. Connect the equipment to the power supply.
- Open the water inlet valve to the equipment, allowing it to start operating and allowing the sanitizing product to be pushed into it. Keep the inlet valve in this position and let the equipment operate until the tanks are full.

verify that the equipment is properly rinsed, empty it as necessary if any traces of sanitizing product are detected.

## 11. INTERFAZ CON EL USUARIO

**!** At attention: Depending on the model, the equipment may incorporate an electronic controller that will efficiently manage the functionality and status indications, as well as the different security systems.

If you do incorporate it, see Chapter 16 (User Interface) which describes the states each system can be in and the information provided by it.



- Close the inlet valve (8) and unplug the equipment from the power supply, wait for the equipment to stop pouring water through the rejection outlet into the drain.

- Let the filters soaked in the Product sit for 20 minutes.

### 10.2 Sanitizing the tanks and front dispenser

- Sanitize the nozzles of the front dispensers using cotton swabs and sanitizing spray.

- Empty the tanks completely through the front dispensers and the drain outlet. Refill the tanks and required according to your equipment model and how to access the filters.

- Remove the complementary elements used for Sanitization and reconnect the feed tube to the inlet (IN) of the equipment.

- Open the stopcock and supply electricity to the equipment so that it starts up.

- Use the sanitizing product detection strips (318701) to

## 12. TECHNICAL CHARACTERISTICS

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### APPLICATION

ROP (Reverse Osmosis) Model

#### Use

Improving the characteristics of drinking water (complying with the requirements of the European Directive on water for human consumption 98/83 or its national transpositions in the different member states of the European Community).

#### Modifications due to reduction or contribution

ROP model

· Water treatment using reverse osmosis is capable of reducing the concentration of salts and other substances in high percentages.

· Minimal reduction\* of certain compounds and parameters:

Sodium – 90 %  
Calcium – 90%  
Sulfate – 90%  
Chloride – 90%  
Total hardness – 90%  
Conductivity – 90%

(\* Depending on the characteristics of the water to be treated (at the membrane outlet). These values may vary depending on the type of post-filter incorporated in the equipment.

### OPERATING LIMITS

#### ROP

|                           |                                      |
|---------------------------|--------------------------------------|
| Presión (max. / min.)     | 2,5 bar (250 kPa)<br>1 bar (100 kPa) |
| TDS (max.)                | 2000 ppm                             |
| Temperature (max. / min.) | 40°C - 2°C                           |
| Hardness (max.)           | 15°HF**                              |

### TECHNICAL DATA

#### ROP

|                   |   |
|-------------------|---|
| Control type:     | Level switch.<br>Inlet solenoid valve.<br>Cold water thermostat.<br>Hot water thermostat. |
| Security system:  | Thermal protector of hot water safety.  |
| Input connection: | 1/4"  |
| Drain connection: | 1/4"  |
| Wall adapter:     | 3/8"  |
| Drain collar:     | Clamp for 40mm drain pipe.  |

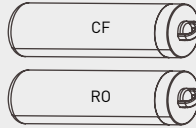
**TECHNICAL DATA**

**ROP**

**Treatment:** 1 Sediment and carbon prefilter.  
1 GPD membrane with post-filter.

**Connection:** Instant connection

**Cartridges:**



**Dimensions:** [A x B x C] 480 x 280 x 455  
**Weight:** 14 kg

**TOTAL VOLUME OF TANKS:** 4,2 liters  
**Cold water tank:** 2 liters  
**Hot water tank:** no tank  
**Carbonated water tank:** 1 liter

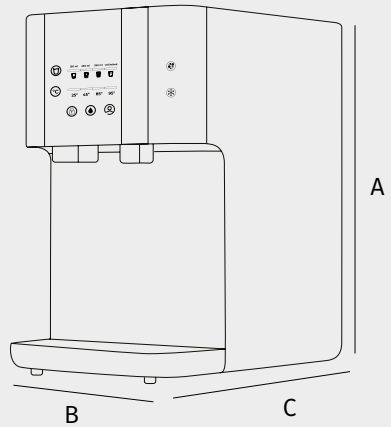
**Input connection:** 1/4"  
**Drain connection:** 1/4"  
**Power supply:** 220 – 240 Vac

**COOLING SYSTEM**

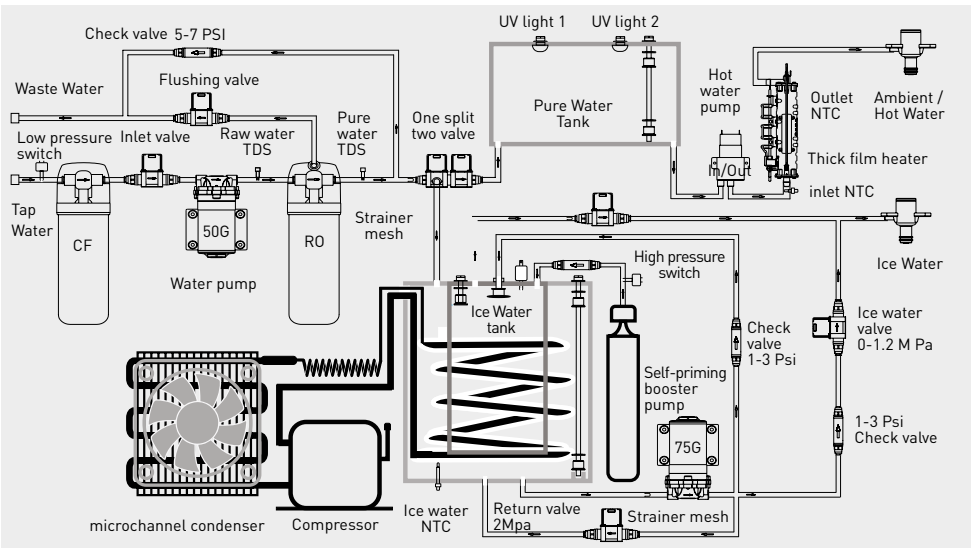
**Compressor:** 1/11 CV sealed  
**Compressor power:** 70W  
**Condenser:** Hair type  
**Refrigerant gas:** R600a  
**Temperature control:** Temperature sensor

**HEATING SYSTEM**

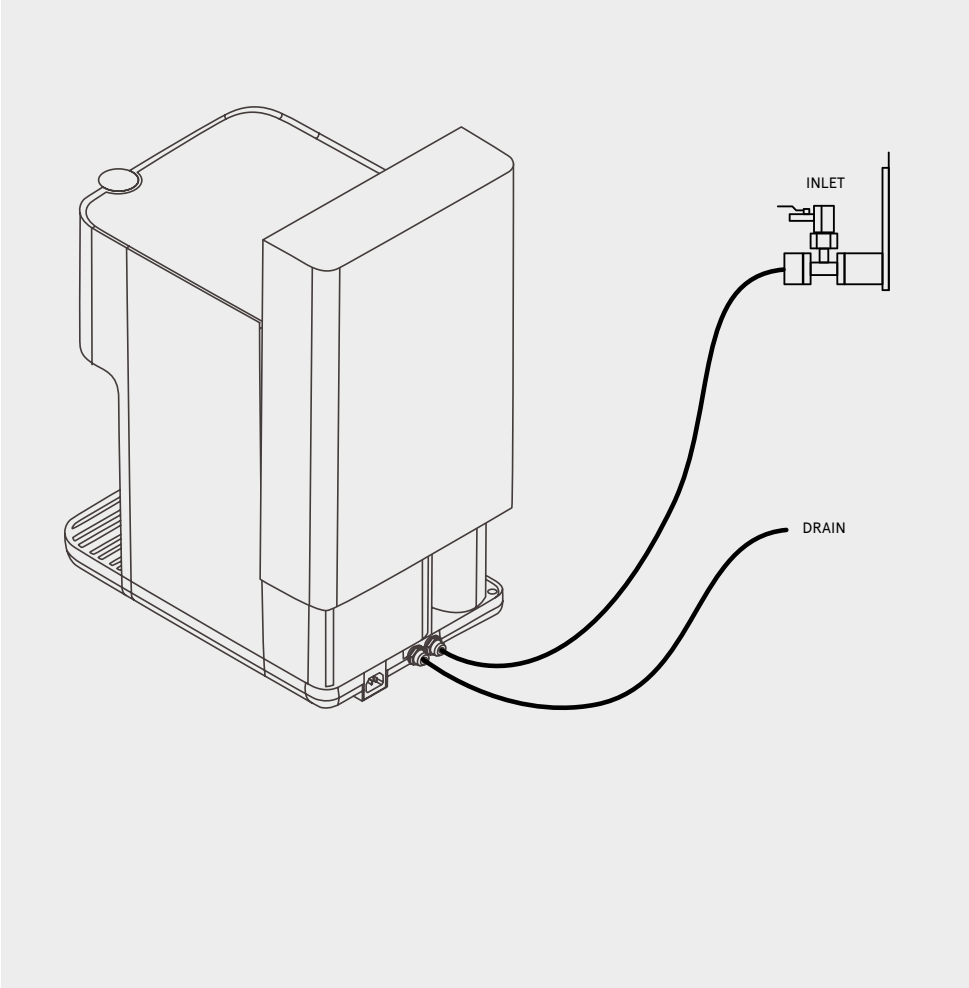
**Heater:** Instant  
**Heater power:** 2100 W  
**Temperature control:** Temperature sensor  
**Overheat protection:** Self-arming bimetal



**ROP MODEL HYDRAULIC DIAGRAM**

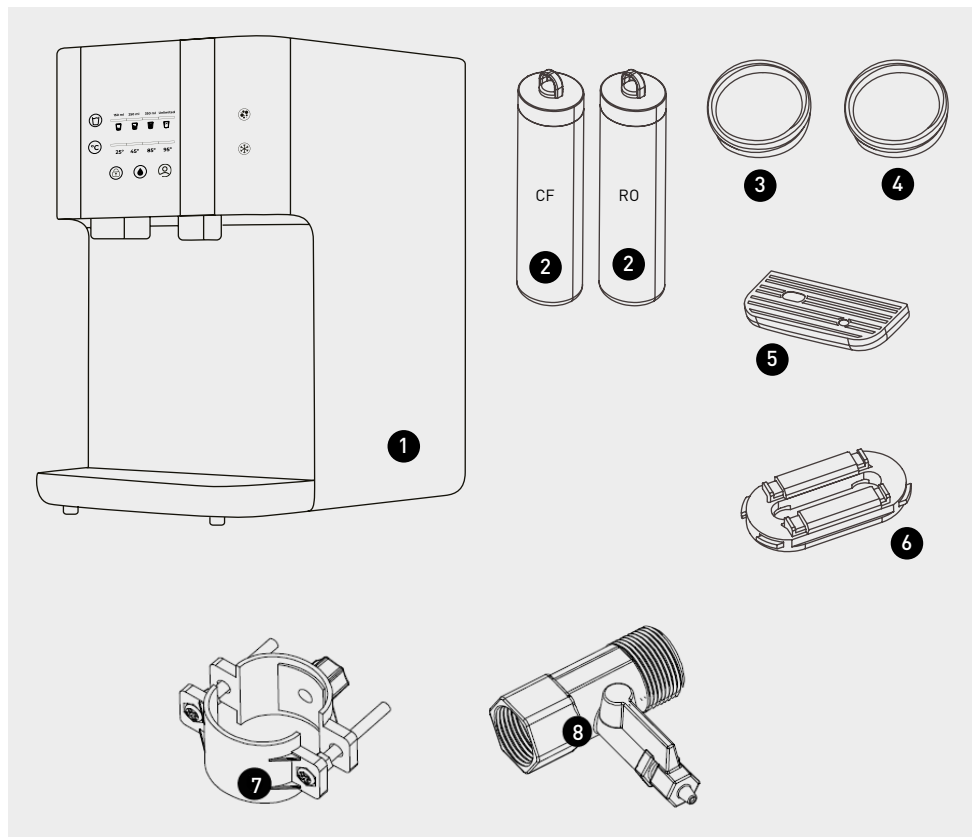


HYDRAULIC CONNECTION DIAGRAM ROP MODEL





### 13. COMPONENT IDENTIFICATION



1. JUMAN dispensing equipment.

2. Filtration/carbon cartridges and RO membrane/post-filter.

3. Inlet connection tube.

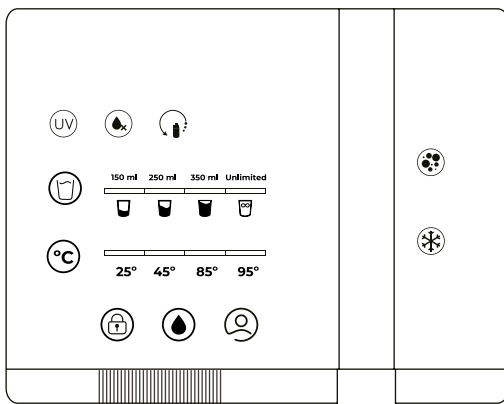
4. Drain connection pipe.

5. Drip tray.

6. Cartridge holding clip.

7. Drain clamp.

8. "T" input connection.



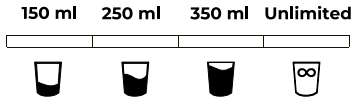
## 14. HOW TO EXTRACT WATER FROM THE DISPENSER

**How to select the volume of water to dispense:**  
With Columbia Aqua Juman dispensers, you can extract different volumes of water that are preset, or you can extract an indefinite volume.



To select the volume of water to extract, press the button and select the desired volume.

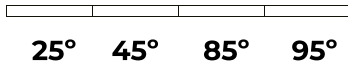
You can select the volume of water to extract, press the button and select the desired volumen.



**How to dispense ambient or hot water:**



You can select 3 hot water temperatures. To select the temperature press the button and select between 25°C (room temperature), 45°C, 85°C and 95°C.



If you have selected ambient water temperature 25°C, press the button to start dispensing water.



If you have selected a temperature between the options 45°C, 85°C and 95°C, press the red unlock button for 3 seconds, and when it turns blue you will be ready to start dispensing.



Press the button to start dispensing water.

If you have selected a preset water volume, dispensing will stop once that volume has been dispensed. If you wish, you can stop dispensing water ahead of time by pressing the button again. If you selected



"Unlimited", you must press the button again to stop dispensing.

**Como dispensar agua fría.**



Press the "cold" button to start dispensing cold water.

If you have selected a preset water volume, dispensing will stop once that volume has been dispensed. If you wish, you can stop dispensing water ahead of time by pressing the button again. If you selected "Unlimited", you must press the button again to stop dispensing.



**How to dispense sparkling water (gray model only).**



Press the "sparkling" button to start dispensing sparkling water.

If you have selected a water volume prefix, dispensing will stop once that volume has been dispensed. If you wish, you can stop dispensing water early by pressing the button again. If you have selected "Unlimited", you must press the button again to stop dispensing.



**How to set a favorite selection.**



Select the volume and temperature you use most often, press the button for 3 seconds, and once you hear a beep, the selection will be saved. Press button every time you want to dispense water from this selection.

If you wish, you can stop dispensing water prematurely by pressing the button again.

## 15. USER INTERFACE

The front panel displays information other than volume and temperature options.



Columbia Aqua Juman dispensers have 4 UV LED germicidal lamps, two in the filtered water tank, another in the outlet of ambient and hot water, and another in the cold water and sparkling water outlet (depending on the model). The indicator will light up periodically, when the UV lamps are switched on.



The indicator warns of a mains water failure by flashing red.

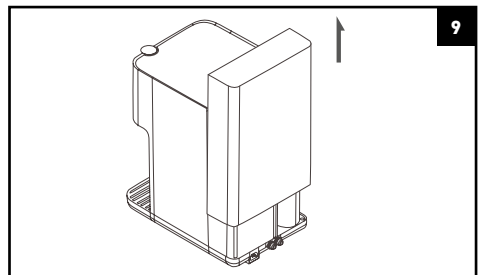


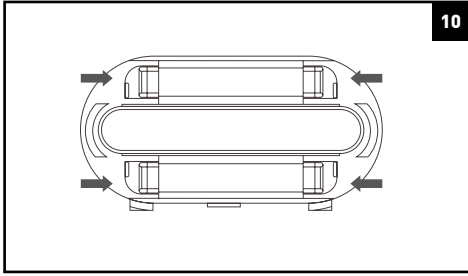
The indicator warns of the need to carry out maintenance and change the equipment filters.

## 16. HOW TO ACCESS AND CHANGE FILTERS.

Close the water tap and unplug the equipment. Pull the back cover upwards (9).

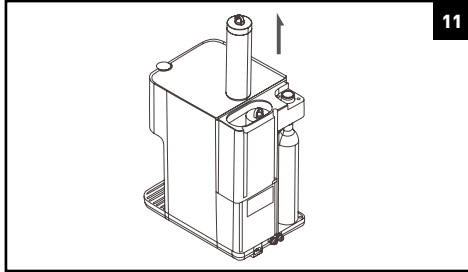
Using both hands, press the retaining clip detents toward the center and pull the clip out (10).



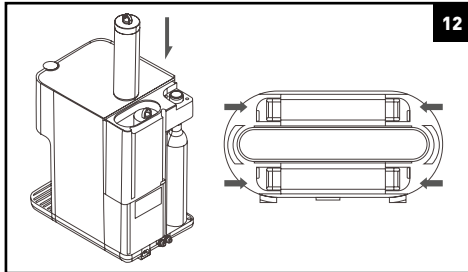


10

Pull up the handle of the filter you need to replace and insert the new filter, and attach the clip (11, 12).

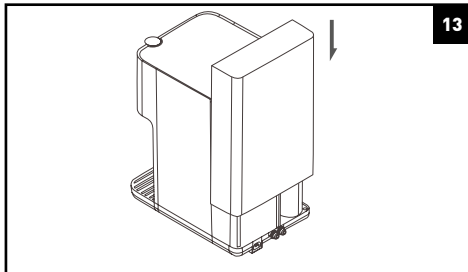


11



12

Replace the back cover (13).

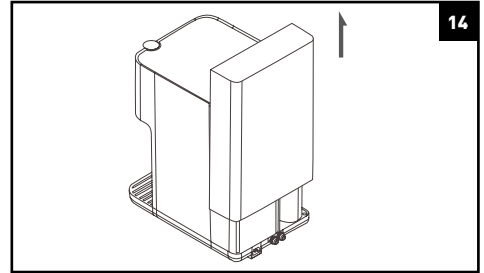


13

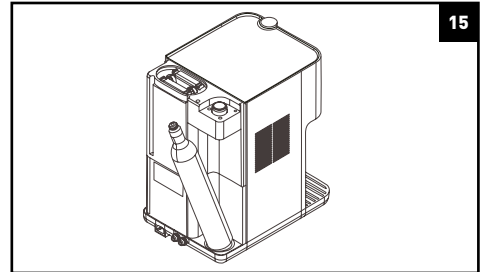
## 17. HOW TO REPLACE THE CO<sub>2</sub> CYLINDER

Pull the back cover up and place the cylinder on its base.

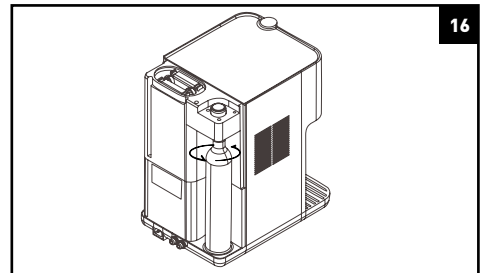
Lift the cylinder and screw it firmly counter-clockwise. Replace the cover.



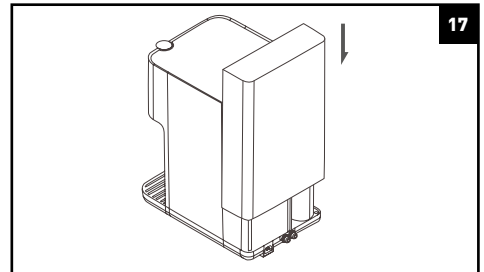
14



15



16



17

## 18. 18.TROUBLESHOOTING

| THE TANK DOES NOT FILL AT ALL                                       |  |  |
|---|--|--|
| Problem   | Reason   | Solution   |
| <b>1. No water enters the device.</b>                               | The stopcock is closed   | Open the stopcock.                                 |
|   | The source is unplugged  | Plug the power supply into the power supply.       |
|   | There is no water supply   | Problem unrelated to the source.                   |
|   | Obstruction in the feed tube to the source   | Change the feeding tube.                           |
| <b>2. Water enters the device, but does not reach the membrane.</b> | The solenoid valve does not open   | See point 3.                                       |
|   | There is a clogged filter  |  |
| <b>3. The solenoid valve does not open.</b>                         | There is no current to the solenoid valve  | The tank is full and there is no demand for water. |
|   | The solenoid valve is damaged, since it receives current and does not open (Check with a voltmeter)                        | Replace the solenoid valve.                        |
| <b>4. The solenoid valve and pump do not work.</b>                  | The level switch does not work   | See point 6.                                       |
| <b>5. The solenoid valve opens, but the pump does not work.</b>     | Cable disconnected   | Check that there are no loose cables.              |
|   | Damaged bomb   | Change the pump.                                   |
| <b>6. The level switch does not work.</b>                           | It is damaged and does not respond when raising and lowering the float   | Change the level switch.                           |
|   | The electronic card is damaged   | Change the electronic card.                        |
| PRODUCTION IS SCARCE  |  |  |
| <b>7. Production is lower.</b>                                      | Partial clogging of the sediment filter, comparing the inlet flow rate with the outlet flow rate of the sediment cartridge | Change the sediment filter.                        |
|   | Partial obstruction of the solenoid valve, comparing the inlet flow with the outlet flow of the solenoid valve             | Change the solenoid valve                          |
|   | The membrane is clogged  | See point 8.                                       |
| <b>8. The membrane is clogged.</b>                                  | The equipment does not reject water  | Change the flow restrictor and membrane.           |
|   | The membrane is more than 3 years old  | Change the membrane.                               |
|   | The TDS of the inlet water is greater than 1500 ppm  | Contact technical support.                         |

| <b>WATER DOESN'T STOP COMING OUT OF THE DRAIN</b>                |  |   |
|--|--|---|
| <b>9. The fountain never stops pouring water down the drain.</b> | Level switch does not respond to full tank command (Check with a voltmeter)                                      | Change the level switch.  |
|  | The inlet solenoid valve has jammed since it does not close when the power is disconnected.                      | Replace the inlet solenoid valve.                                 |
| <b>THE WATER QUALITY IS NOT GOOD</b>                             |  |   |
| <b>10. The water quality is not correct.</b>                     | The rejection flow rate is much less than 0.5 liters per minute.   | Replace the reject flow restrictor.                               |
|  | The membrane has reached the end of its useful life and no longer removes 90% of the salts from the inlet water. | Change the membrane.  |
| <b>11. The water tastes bad.</b>                                 | The source is contaminated.  | Perform a complete sanitization of the fountain.                  |
| <b>THE FOUNTAIN DOES NOT COOL OR LITTLE COLD WATER COMES OUT</b> |  |   |
| <b>12. The water does not come out cold.</b>                     | The customer takes out bottles of cold water and empties the cold-water tank.                                    | The fountains are designed so that water is drawn glass by glass. |
|  | The cooling system is damaged, or the refrigerant gas has been lost.   | Remove the power supply for repair in a workshop.                 |
| <b>THE FOUNTAIN DOES NOT HEAT OR LITTLE HOT WATER COMES OUT</b>  |  |   |
| <b>13. The water does not come out hot.</b>                      | The hot tank thermostat is damaged.  | Change the hot tank thermostat.                                   |
|  | The resistance is damaged.   | Change the resistance.  |

## 19. 19. INSTALLATION REGISTRATION SHEET



**NOTES FOR THE TECHNICIAN/INSTALLER:** Please read this manual carefully. If you have any questions, please contact your distributor's Technical Assistance Service (SAT). The data marked with the symbol \* must be filled in by the technician/installer and transcribed by him/her onto the WARRANTY sheet. This sheet must be kept by the installer and may be requested by the distributor in order to improve after-sales service and customer service to the customer. The technician who installs and commissions the equipment must have the appropriate technical training.

### DATA ON THE APPLICATION OF THE EQUIPMENT:

Origin of the water to be treated:

PUBLIC SUPPLY NETWORK

OTHERS: \_\_\_\_\_

\*Pre-equipment treatment: \_\_\_\_\_

\* Equipment input hardness (°F): \_\_\_\_\_

\* TDS entering the equipment (ppm): \_\_\_\_\_

\* TDS produced water (ppm): \_\_\_\_\_

\* Equipment inlet pressure (bar): \_\_\_\_\_

### CONTROL OF INSTALLATION STEPS:

Pre-filter assembly: \_\_\_\_\_

Overflow installation: \_\_\_\_\_

Start-up according to protocol: \_\_\_\_\_

Checking fittings: \_\_\_\_\_

Input hardness measurement: \_\_\_\_\_

Output hardness measurement: \_\_\_\_\_

Insulation bypass installation: \_\_\_\_\_

Correct darinage installation: \_\_\_\_\_

Checking brine suction/tank filling: \_\_\_\_\_

Tightness of the pressurized system: \_\_\_\_\_

Equipment programming: \_\_\_\_\_

Adjustement of residual hardness: \_\_\_\_\_

### COMMENTS

\* Installation and commissioning result::

CORRECT (equipment installed and functioning correctly. Water produced appropriate to the application).

OTHERS: \_\_\_\_\_

### IDENTIFICATION OF THE AUTHORIZED TECHNICIAN/INSTALLER:

COMPANY AND/OR AUTHORIZED INSTALLER, DATE AND SIGNATURE:

### EQUIPMENT OWNER CONFORMITY:

I have been clearly informed of the use, handling and maintenance required by the installed equipment, having been offered a maintenance contract and informed of how to contact a Customer Service Department in case of requesting information, reporting a breakdown or malfunction, requesting maintenance or intervention of a technician.

Comments: \_\_\_\_\_

\*Ref. Maintenance contract: \_\_\_\_\_

ACCEPT the maintenance contract

DOES NOT ACCEPT the maintenance contract

Model/Ref.: \_\_\_\_\_

Owner: \_\_\_\_\_

Street: \_\_\_\_\_

Phone: \_\_\_\_\_

Population: \_\_\_\_\_

Province: \_\_\_\_\_

C.P.: \_\_\_\_\_

### SERIAL NUMBER:

### EQUIPMENT WARRANTY ADDRESSED TO THE DISTRIBUTOR:

The distributor will only be responsible for the replacement of parts in the event of non-compliance. The repair of the equipment and the costs involved (labor, shipping costs, travel, etc.) will be assumed by the distributor, in accordance with the terms and conditions of the general contract and sale, and therefore cannot be subsequently passed on to the manufacturer.

## 20. WARRANTY

This equipment has a warranty period as established by current legislation.

- The warranty covers the repair and replacement of defective parts by personnel authorized by the distributor or by the official technical assistance service (SAT) at the installation site or in its workshops. The warranty includes labor and any shipping costs that may be incurred.
- The distributor is exempt from providing a guarantee in the case of parts subject to natural wear and tear, lack of maintenance, knocks or other non-conformities that are the result of improper use of the equipment or inadequate use according to the operating conditions and limits indicated by the manufacturer. Likewise, the guarantee loses its effectiveness in cases of improper handling and use of the equipment or in those cases in which it has been modified or repaired by personnel other than the distributor company or official SAT.
- Parts replaced under warranty will remain the property of the distributor.
- The distributor is responsible for the lack of conformity of the equipment when this refers to the origin, identity or suitability of the products, according to their nature and purpose. Taking into account the characteristics of the equipment, it is essential for the guarantee to cover the lack of conformity that the technical conditions of installation and operation are met. Failure to comply with these conditions may result in the absence of the guarantee, taking into account the relevance of the purpose of the equipment and the operating conditions and limits in which it must operate.
- The distributor must ensure that the installed equipment is suitable for improving the quality of the water to be treated in particular, according to the characteristics of the equipment and current regulations.
- The distributor must guarantee the correct installation and start-up of the equipment as indicated by the manufacturer and current regulations and will also be liable for any lack of conformity resulting from incorrect application, installation or start-up of the equipment.
- For any warranty claim, the purchase invoice must be presented. The period is calculated from the purchase of the equipment from the distributor.
- If your equipment presents any problems during the warranty period, contact your distributor.

### The equipment is installed and operating satisfactorily for the client and for the record:

- \* Pre-equipment treatment:
- \* Equipment input hardness (°F):
- \* TDS entering the equipment (ppm):
- \* TDS produced water (ppm):
- \* Equipment inlet pressure (bar):

### \*Result of the installation and commissioning sheet:

Correct:

Others:

*The owner of the equipment has been adequately and clearly informed of the use, handling and maintenance that the equipment requires to ensure its correct operation and the quality of the water produced. For this purpose, a maintenance contract is offered.*

\*Ref. Maintenance contract:

ACCEPT the maintenance contract

DOES NOT ACCEPT the maintenance contract

*If you need information, report a fault or malfunction, request maintenance or have a technician intervene, please read the sections on operation, detection and resolution of problems in this manual beforehand and contact the distributor or company that sold you your equipment.*

COMPANY AND/OR AUTHORIZED INSTALLER, DATE AND SIGNATURE:

SERIAL NUMBER:



**NOTE TO THE COMPANY AND/OR AUTHORIZED TECHNICIAN/INSTALLER:** the data marked with the symbol \* must be filled in by the installation technician and transcribed by him/her from the INSTALLATION RECORD sheet.

## 21. MAINTENANCE SERVICE

| DATE                 | TYPE OF SERVICE                            | NAME, SIGNATURE AND SEAL OF THE AUTHORIZED TECHNICIAN |   |
|----------------------|--|---|---|
| <input type="text"/> | <input type="radio"/> START-UP             |   |   |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE | TECHNICAL<br><input type="text"/>                     | <input type="radio"/> ORDINARY<br><input type="radio"/> EXTRAORDINARY<br><input type="radio"/> WARRANTY |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  |   |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  |   |
| <input type="text"/> | <input type="radio"/> OTHERS               |   |   |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE |   |   |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  |   |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  |   |
| <input type="text"/> | <input type="radio"/> OTHERS               |   |   |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE |   | TECHNICAL<br><input type="text"/>   |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  |   |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  |   |
| <input type="text"/> | <input type="radio"/> OTHERS               |   |   |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE |   | TECHNICAL<br><input type="text"/>   |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  |   |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  |   |
| <input type="text"/> | <input type="radio"/> OTHERS               |   |   |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE |   | TECHNICAL<br><input type="text"/>   |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  |   |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  |   |
| <input type="text"/> | <input type="radio"/> OTHERS               |   |   |



## 21. MAINTENANCE SERVICE

| DATE                 | TYPE OF SERVICE                            | NAME, SIGNATURE AND SEAL OF THE AUTHORIZED TECHNICIAN |                                     |
|----------------------|--|---|-------------------------------------|
| <input type="text"/> | <input type="radio"/> START-UP             |   |                                     |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE | TECHNICAL<br><input type="text"/>                     |                                     |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  | <input type="radio"/> ORDINARY      |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  | <input type="radio"/> EXTRAORDINARY |
| <input type="text"/> | <input type="radio"/> OTHERS               |   | <input type="radio"/> WARRANTY      |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE | TECHNICAL<br><input type="text"/>                     |                                     |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  | <input type="radio"/> ORDINARY      |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  | <input type="radio"/> EXTRAORDINARY |
| <input type="text"/> | <input type="radio"/> OTHERS               |   | <input type="radio"/> WARRANTY      |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE | TECHNICAL<br><input type="text"/>                     |                                     |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  | <input type="radio"/> ORDINARY      |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  | <input type="radio"/> EXTRAORDINARY |
| <input type="text"/> | <input type="radio"/> OTHERS               |   | <input type="radio"/> WARRANTY      |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE | TECHNICAL<br><input type="text"/>                     |                                     |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  | <input type="radio"/> ORDINARY      |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  | <input type="radio"/> EXTRAORDINARY |
| <input type="text"/> | <input type="radio"/> OTHERS               |   | <input type="radio"/> WARRANTY      |
| <input type="text"/> | <input type="radio"/> COMPLETE MAINTENANCE | TECHNICAL<br><input type="text"/>                     |                                     |
| <input type="text"/> | <input type="radio"/> PREPARATION          | SEAL  | <input type="radio"/> ORDINARY      |
| <input type="text"/> | <input type="radio"/> HYGIENIZATION        | <input type="text"/>                                  | <input type="radio"/> EXTRAORDINARY |
| <input type="text"/> | <input type="radio"/> OTHERS               |   | <input type="radio"/> WARRANTY      |





