

KENT SUPERB
FOR MOUNTING ON KITCHEN WALL

KENT
Mineral RO™
Water Purifiers

HOUSE of PURITY

Instruction Handbook for
Installation, Operation and Maintenance.



SMART RO
WATER PURIFIER
DISPLAY OF PURITY ON TOUCH SCREEN

Kent Se Paayen
Shudh Paani
Boond Boond Mein

KENT RO TECHNOLOGY
Maintains minerals while reducing dissolved
impurities with double purification
RO + UF + UV + TDS Control



Welcome to KENT

Dear Customer,

At the outset, allow us to thank you for your trust in **KENT** water purifiers. We take pride in our reputation for product quality and industry proven performance. We are certain that your decision to own a **KENT Superb Mineral RO™** Smart RO Water purifier will go a long way towards keeping you and your family in good health. We are confident that you will be satisfied with its performance and that it will serve your need for safer and cleaner drinking water without any compromise.

This guide will help you in getting the best out of your water purifier. Please go through this booklet to familiarize yourself with its operation and maintenance.

You can look forward to years of trouble free service. To ensure that the warranty of your water purifier is effective, it is important that you fill up the enclosed warranty card and mail us the installation report within 15 days of purchase. In case you need any further information, contact your nearest **KENT** dealer / branch.

Best Wishes

KENT RO SYSTEMS LTD.

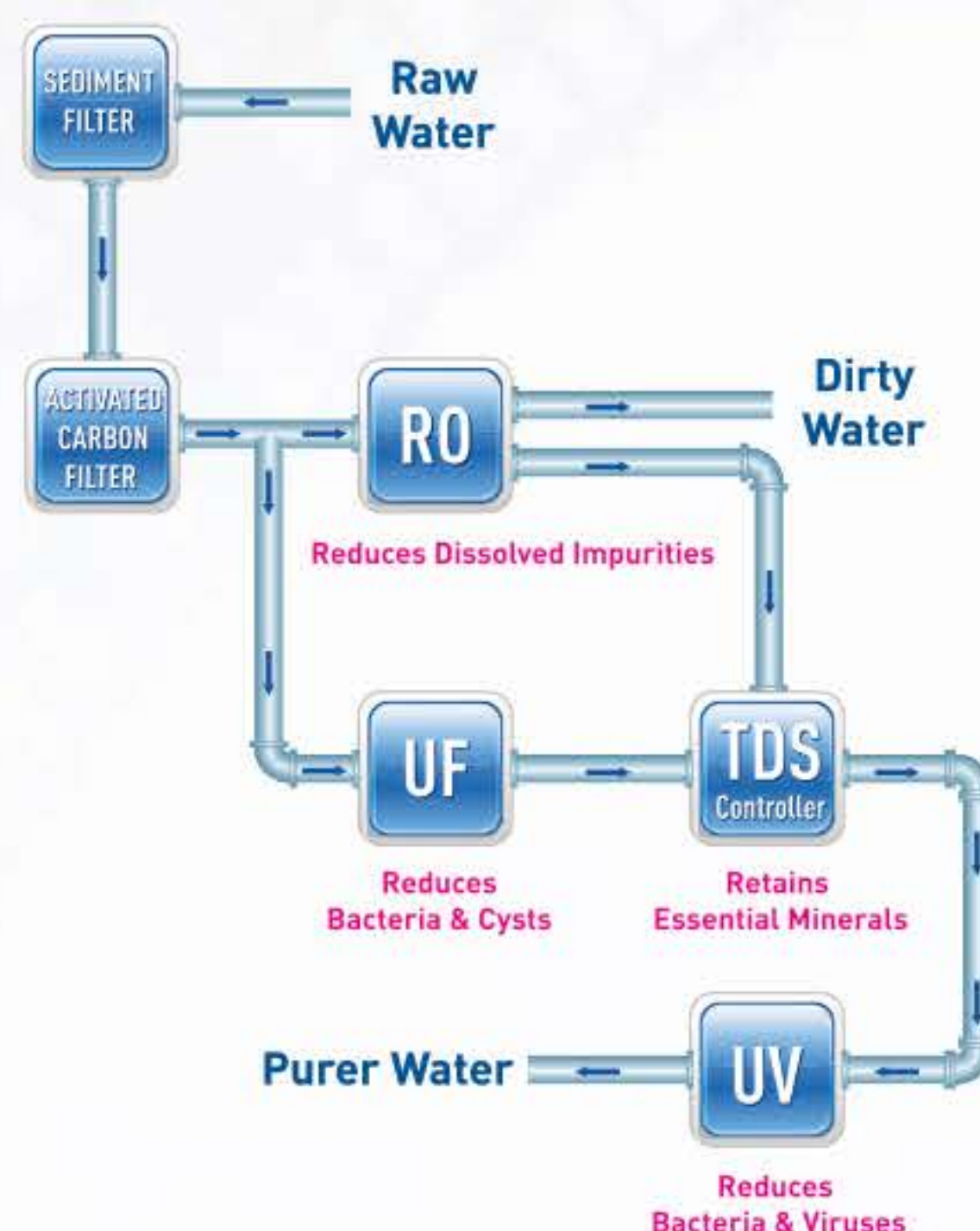
Table of Contents

1. KENT TECHNOLOGY - A breakthrough in Water Purification	1
2. Salient features	1
3. Items in the box	1
4. Important Instructions	2
5. Reverse Osmosis process	3
6. UV process	3
7. Water flow diagram	4
8. Electrical circuit diagram	4
9. KENT Smart RO operation	5
10. Computer controlled operation	8
11. Automatic operation	10
12. Installation Instructions	10
13. TDS adjustment	12
14. Starting up the purifier	12
15. Recommended uses of rejected water	12
16. Maintenance	12
17. Technical Specifications	14

KENT TECHNOLOGY - A Breakthrough in Water Purification*

Presenting the **KENT Superb Mineral RO™** Water Purifier Smart RO Purifier. It uses futuristic and state-of-the-art technology to provide purer & healthier drinking water.

The heart of **KENT Superb Mineral RO™** Water Purifier is a Reverse Osmosis membrane having capillaries as small as 0.0001 microns, which reduces dissolved impurities (salts and heavy metals) and converts hard water to sweet and pure drinking water. With patented mineral retention system, **KENT Superb Mineral RO™** Water Purifier allows the user to control the Total Dissolved Solids (TDS) level in the purified water.



Salient Features of KENT Superb Mineral RO™ Water Purifier


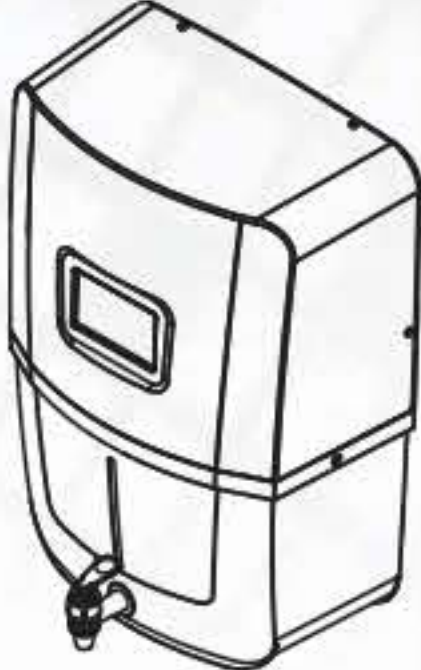
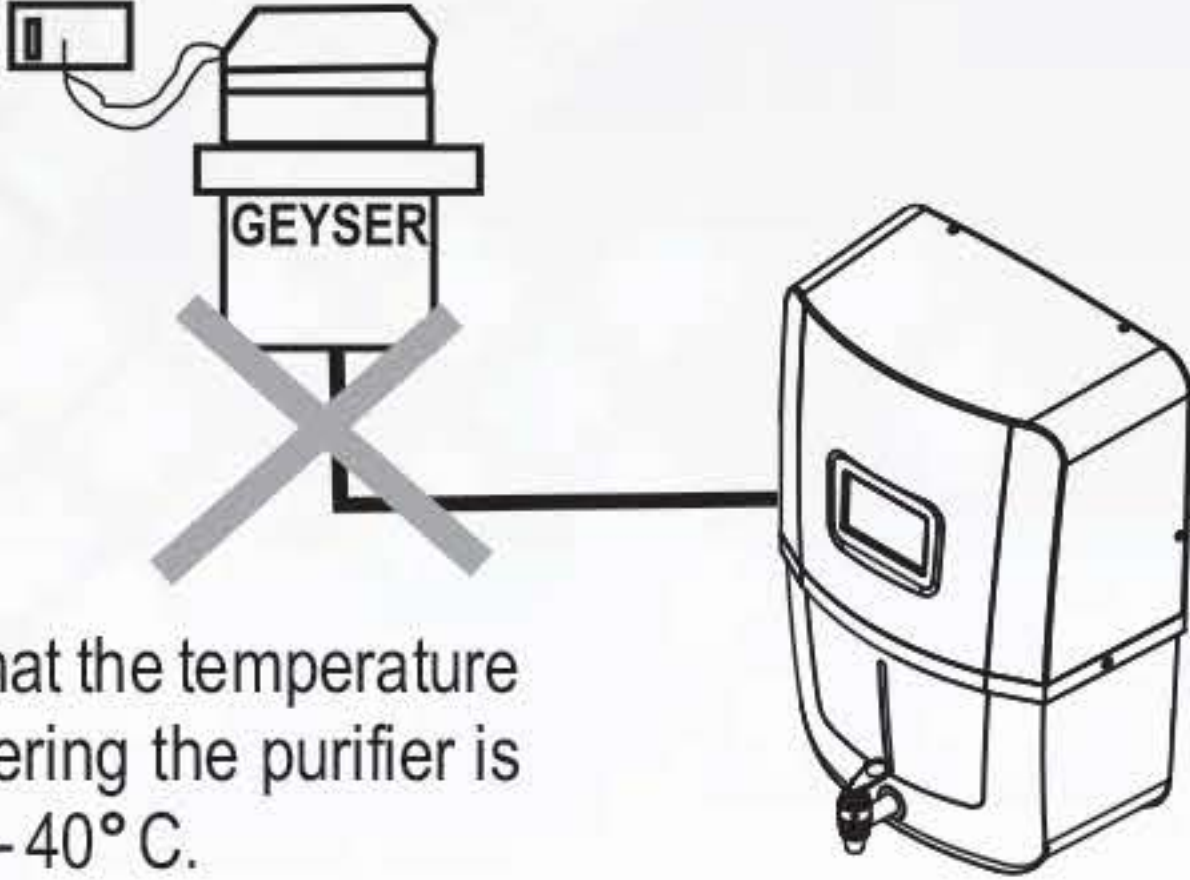
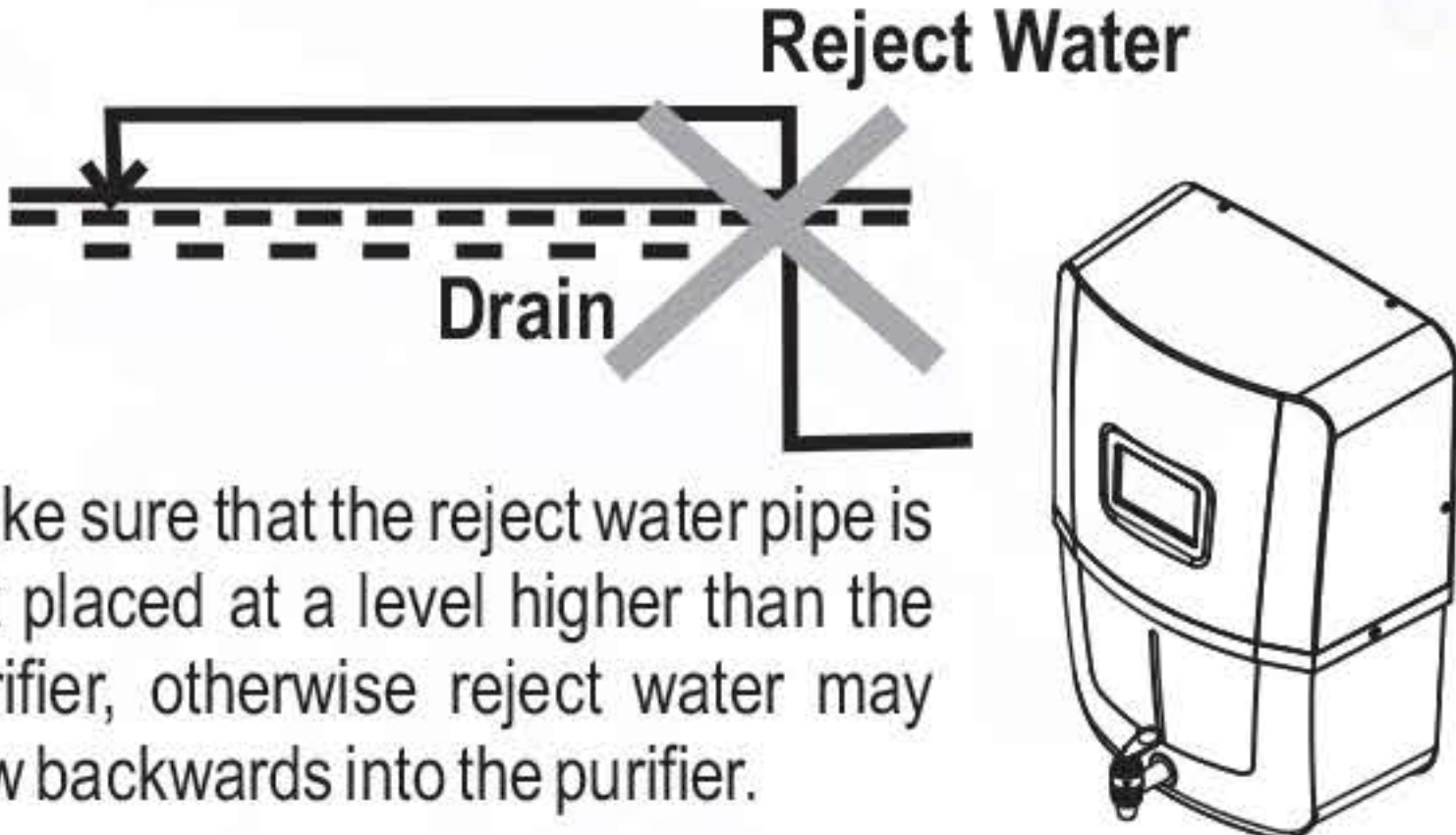
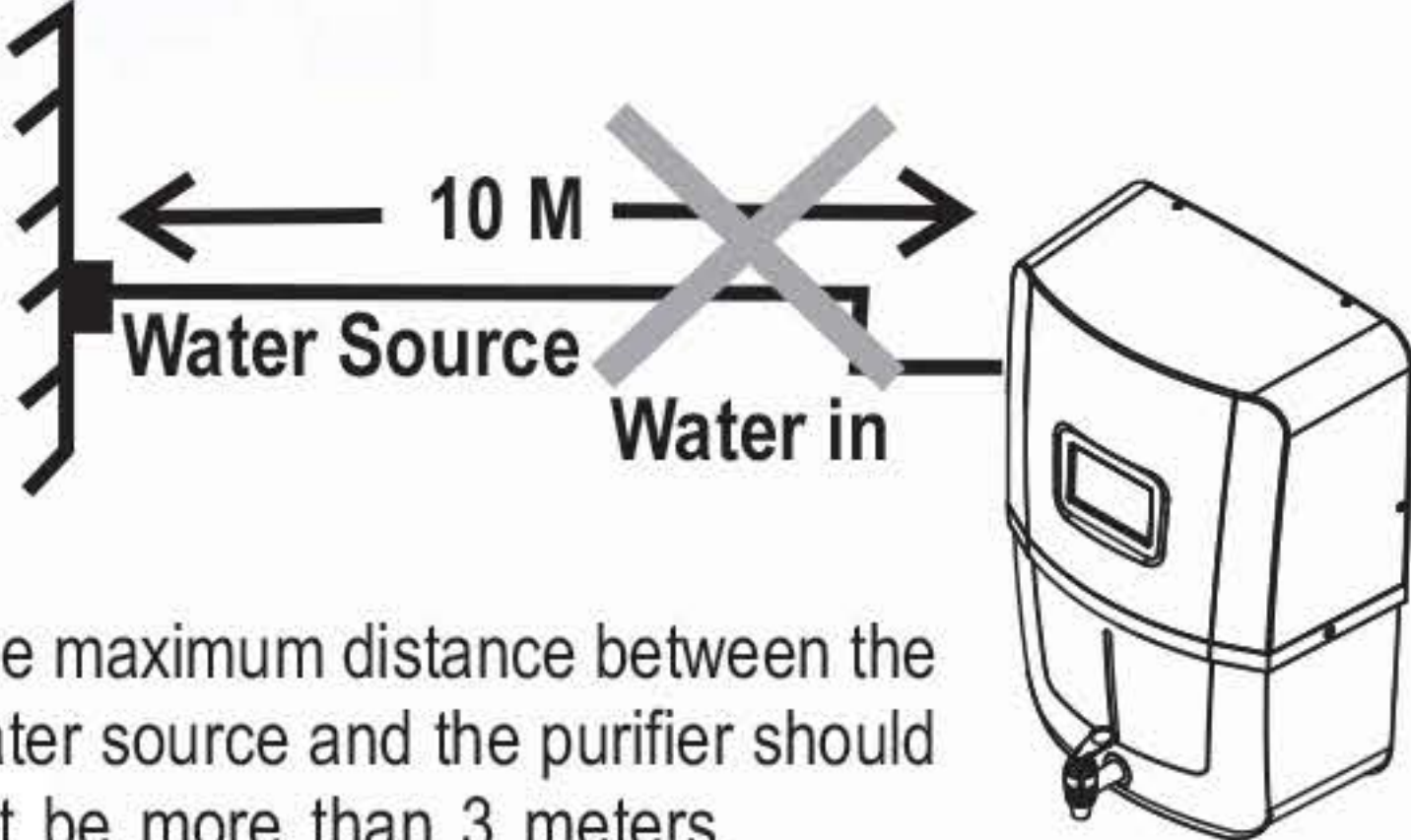
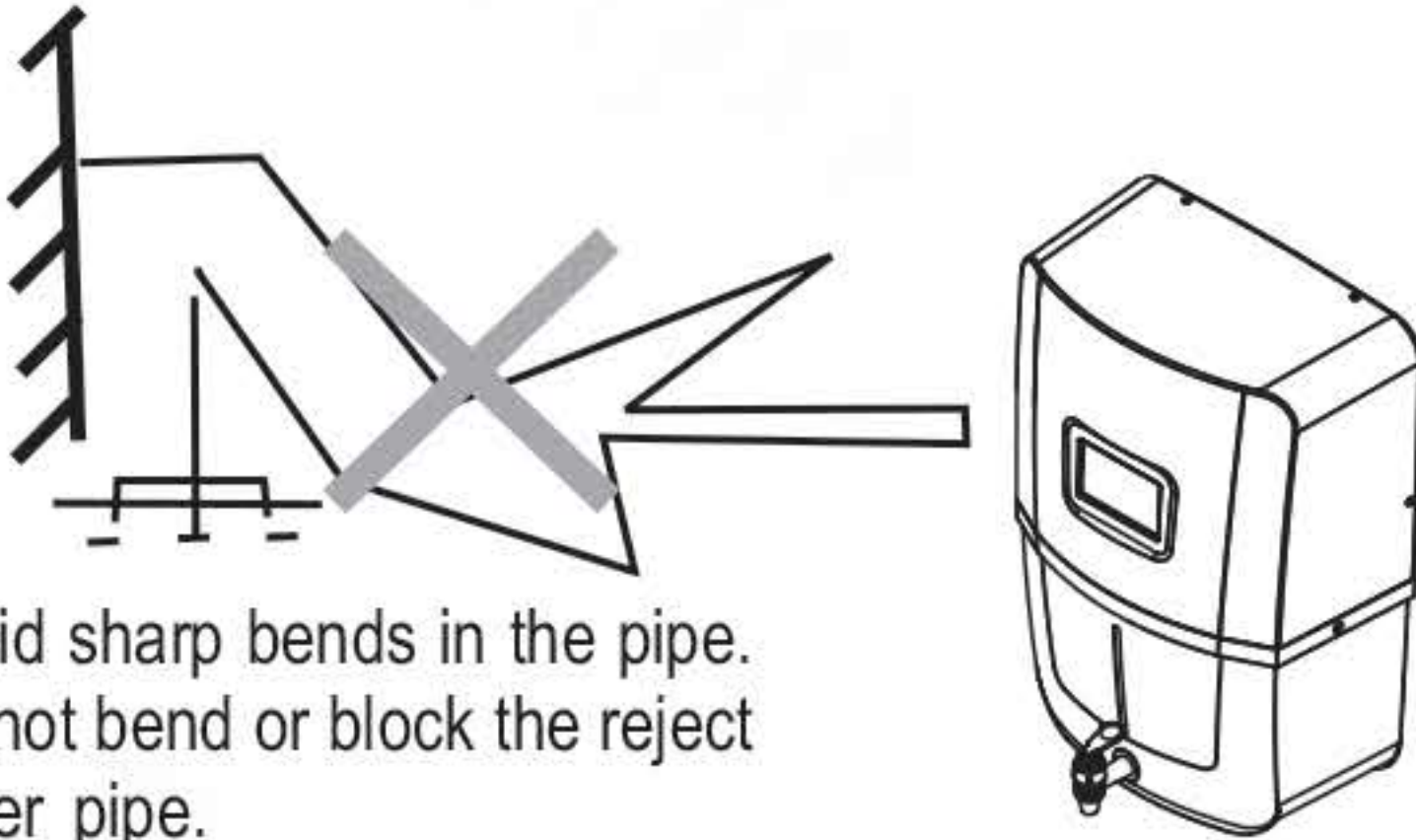
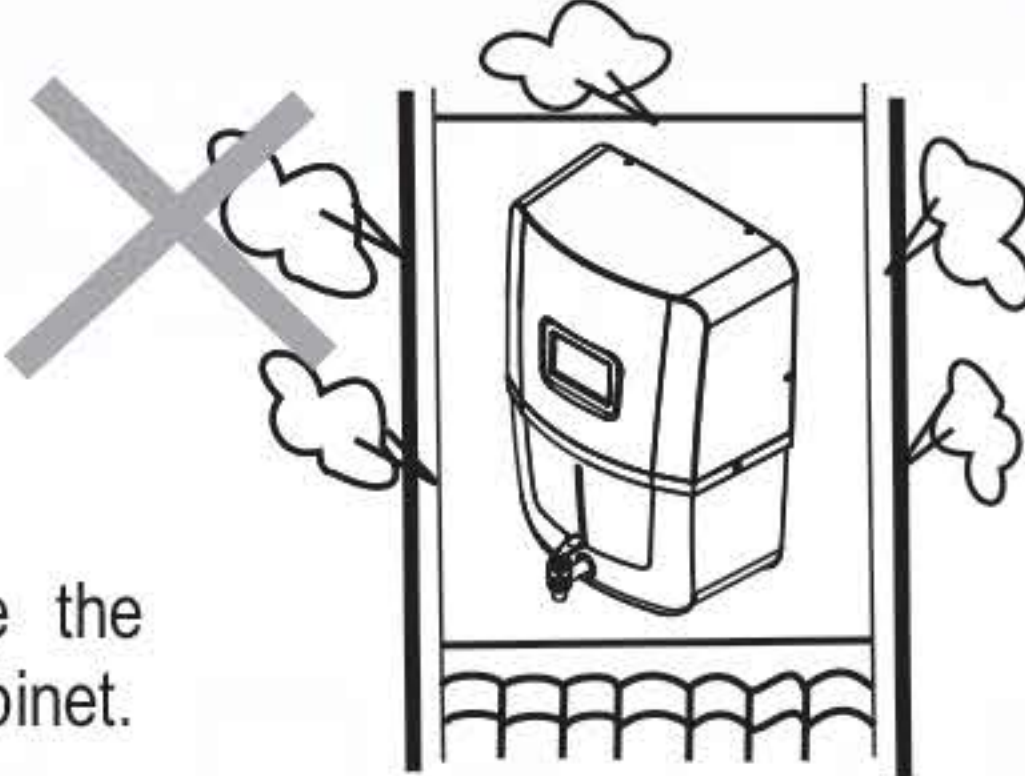


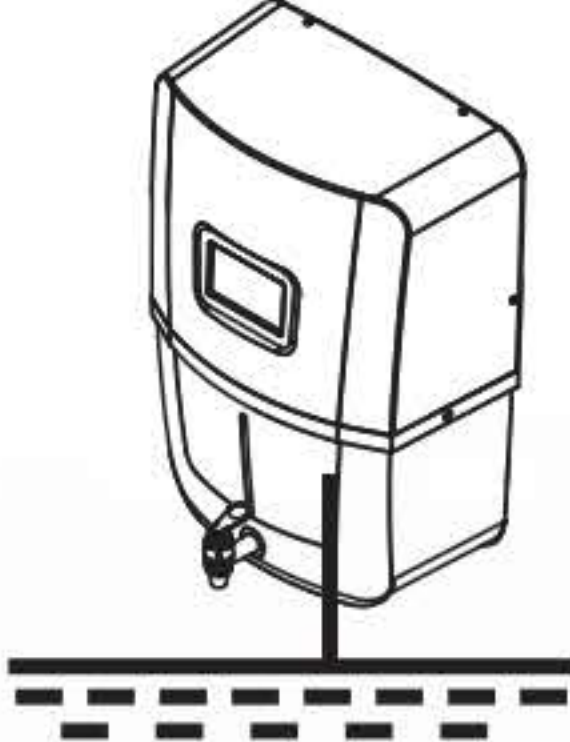

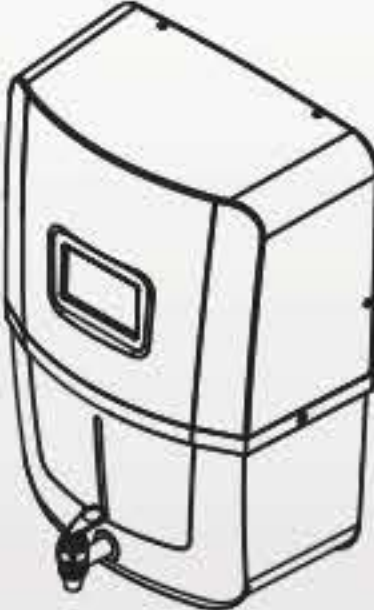
- Smart RO water purifier.
- Interactive Touch Screen Display.
- Real Time Monitoring of Purity, Performance and Service History.
- Built-in Digital interface displays purified water flow rate.
- Double purification by RO + UV/UF* processes.
- Inbuilt TDS Controller which allows adjustment of TDS level of purified water.
- Suitable for purification of Brackish / Tap Water / Municipal Corporation Water Supply.
- Wall mounted design; best suited for Indian homes and offices.
- 9 L storage tank with water level indicator.
- Fully automatic operation, with auto-on and auto-off function.
- Computer controlled operations for enhanced purity and long life.
- RO Membrane fused inside membrane housing to prevent tampering.
- Vertically mounted SMPS for protection from water.
- Use of push-fit fittings for leakage and maintenance free performance.
- An eye appealing design.
- ABS construction for corrosion free use.

Items in the Box

- | | |
|---|----------------|
| 1. KENT Superb Mineral RO™ Water Purifier | : 01 No. |
| 2. 3-Way Connector | : 01 No. |
| 3. S.S. Ball Valve | : 01 No. |
| 4. Food Grade Pipe ¼ inch (Blue) | : 2.5 Meters |
| 5. Food Grade Pipe ⅜ inch (White) | : 2.5 Meters |
| 6. Instruction Manual | : 01 No. |
| 7. Screws & Plastic Inserts | : 02 Nos. each |
| 8. Sticker Center Drill | : 01 No. |

* Tested & Certified by TUV-SUD South Asia (P) Ltd.

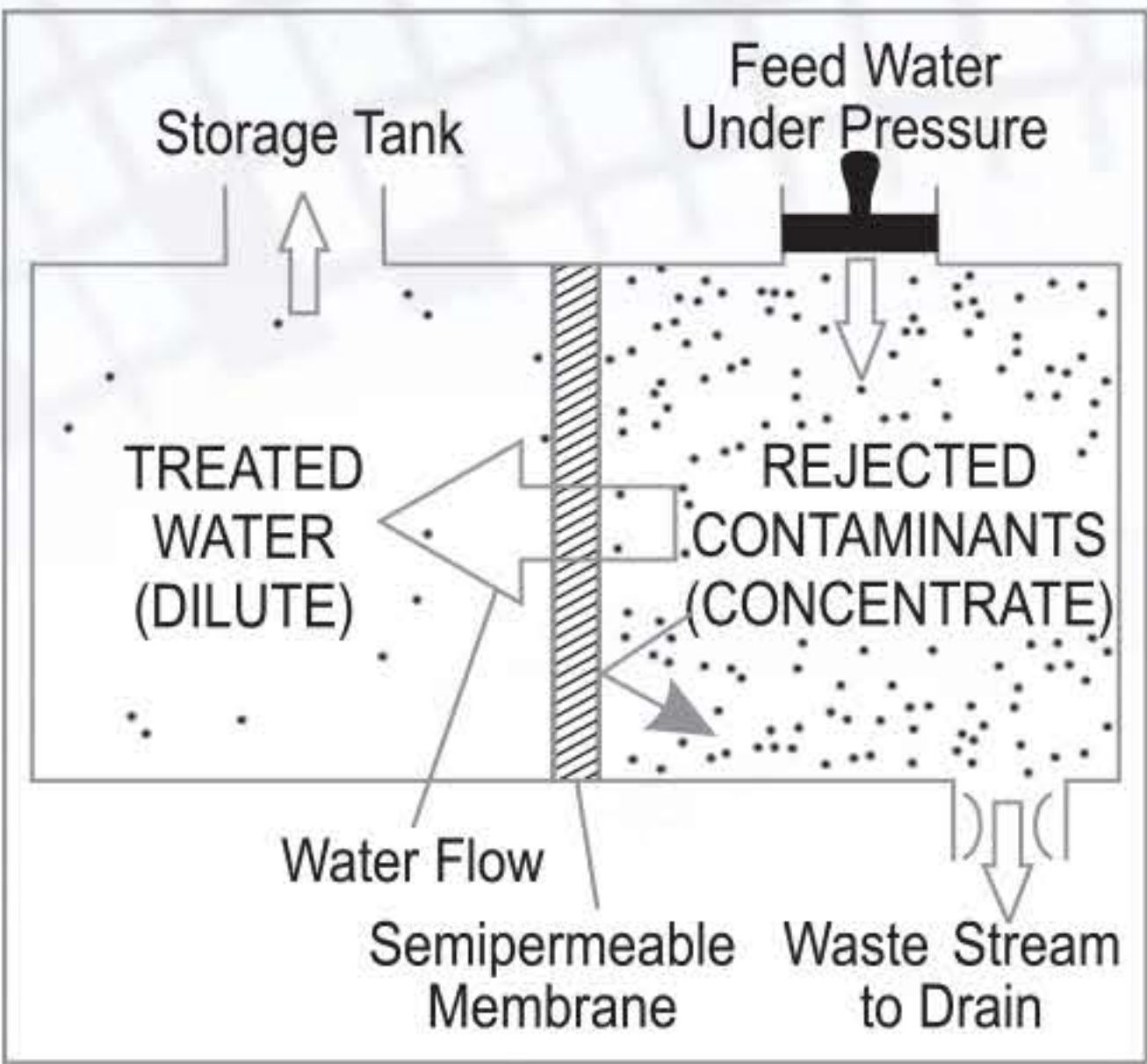
Important Instructions

  <p>Avoid exposure to direct sunlight and installation in damp areas.</p>	 <p>Make sure that the temperature of water entering the purifier is within 10° C - 40° C.</p>
 <p>Make sure that the reject water pipe is not placed at a level higher than the purifier, otherwise reject water may flow backwards into the purifier.</p>	 <p>The maximum distance between the water source and the purifier should not be more than 3 meters.</p>
 <p>Avoid sharp bends in the pipe. Do not bend or block the reject water pipe.</p>	 <p>Do not confine the purifier in a cabinet.</p>
  <p>In case of not using the purifier for more than two days, kindly switch off the power supply and drain the storage tank.</p>	<p>To keep the storage tank clean, it should be drained once every 15 days.</p> 
<div>KENT</div> <div>GENUINE</div> <div>SPARE PARTS</div> <p>Use Genuine Kent spares for optimum performance</p>	  <p>Do not try to service the purifier on your own. Instead, call service technician for help.</p>

Reverse Osmosis Process

The Reverse Osmosis process, also known as hyper filtration, is the finest filtration process known till date. The process ensures reduction of particles as small as ions from a solution. Reverse Osmosis uses a semi-permeable membrane to reduce salts from potable/brackish water. In Reverse Osmosis, water pressure applied to the concentrated side forces the process of osmosis into reverse. Under enough pressure, treated water is "squeezed" through the membrane from the concentrated side to the diluted side. Salts dissolved in water as charged ions are repelled by the RO membrane.

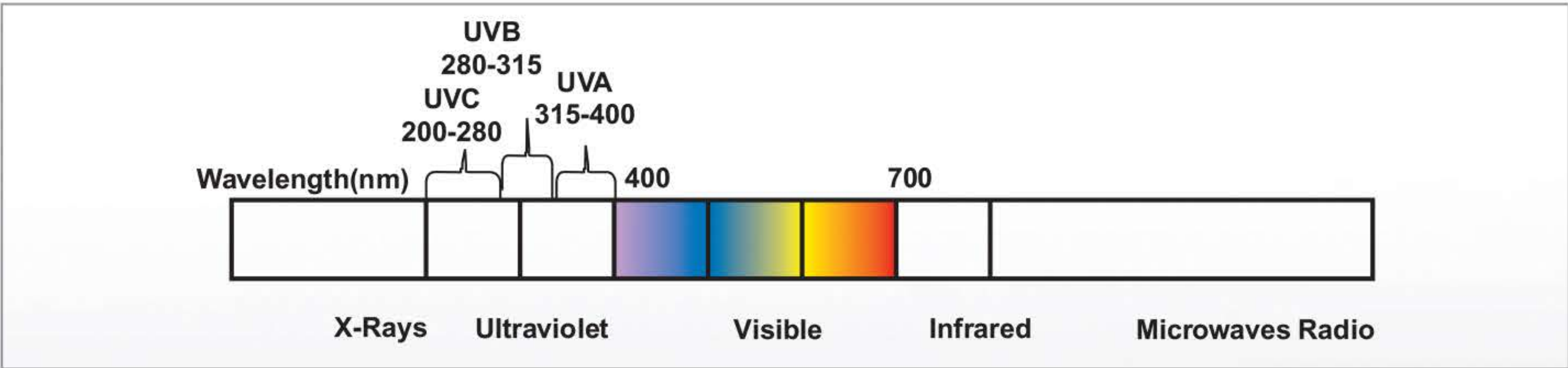
The rejected impurities on the concentrated side of the membrane are washed away in a stream of waste water, thus do not get accumulated as in a traditional filter.



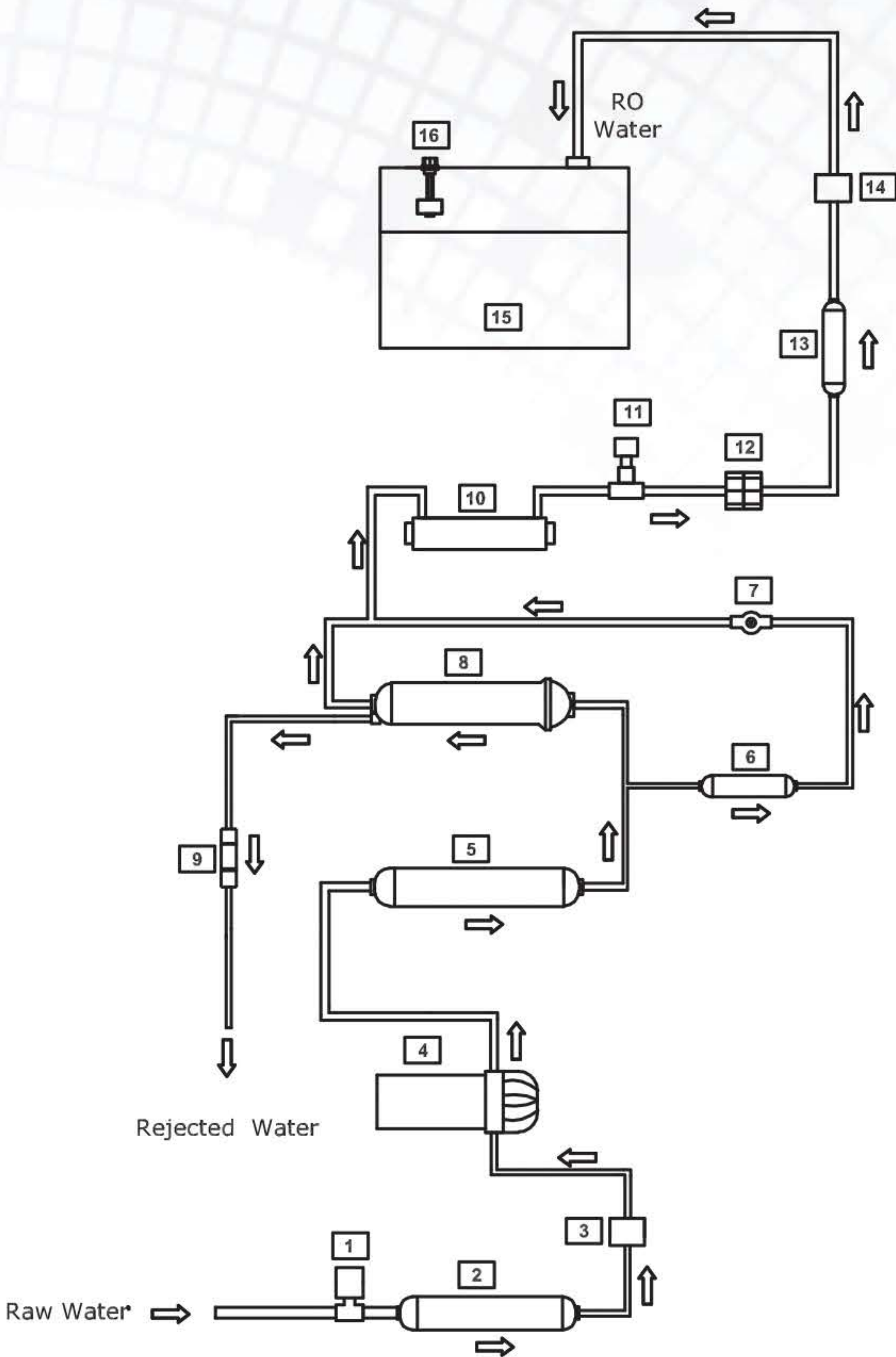
UV Process

The UV light has shorter wavelength (higher energy) than the visible light. It is called ultra-violet because it is just beyond violet light in the light spectrum. Technically, the ultra-violet light is defined to be any wavelength of light, which is shorter than 400 nanometer.

UV rays, which penetrate into the micro-organisms, are absorbed by the DNA of the pathogen in the water. The DNA is altered in such a way that the pathogen cannot reproduce itself. Thus, it is essentially killed and cannot cause infection. This process of DNA modification is called inactivation.

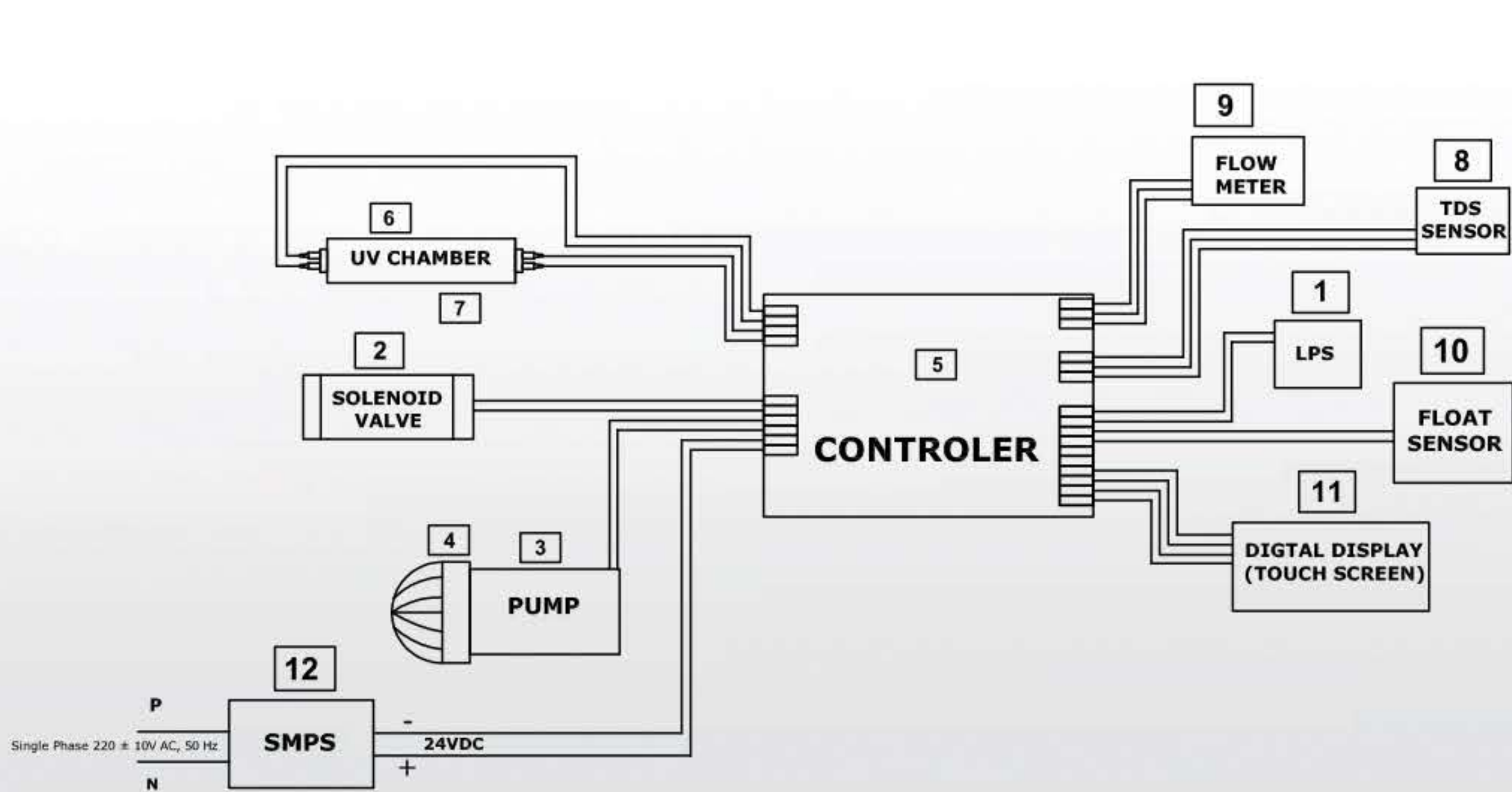


Water Flow Diagram



S.NO.	Spare Code	ITEM DESCRIPTION
1	20035	LOW PRESSURE SWITCH
2	20010	SEDIMENT FILTER
3	20028	SOLENOID VALVE
4	20005	BOOSTER PUMP
5	20009	ACTIVATED CARBON FILTER
6	20003	UF FILTER
7	20034	TDS CONTROL VALVE
8	20002	RO MEMBRANE
9	20018	FLOW RESTRICTOR TUBE
10	20026	UV CHAMBER
11	20441	TDS SENSOR
12	20442	FLOW METER
13	20015	POST CARBON FILTER
14	20058	NON RETURN VALVE
15	20373	WATER STORAGE TANK
16	20030	FLOAT SENSOR

Electrical Circuit Diagram



S.NO.	Spare Code	ITEM DESCRIPTION
1	20035	LOW PRESSURE SWITCH
2	20028	SOLENOID VALVE
3	20005	BOOSTER PUMP
4	20059	PUMP HEAD
5	20450	COMPUTER CONTROL BALLAST
6	20026	UV CHAMBER
7	20025	UV LAMP
8	20441	TDS SENSOR
9	20442	FLOW METER
10	20030	FLOAT SENSOR
11	20449	DIGITAL DISPLAY
12	20016	SMPS

Installation Report

Product : **KENT SUPERB MINERAL RO™**
WATER PURIFIER

Serial No.:

Customer's Name:

Customer's Address:

Customer's Ph.:

TDS of Purified Water:

Customer's Signature:

Invoice No.:

Invoice Date:

Installation Date:

Service Provider's Name:

Service Provider's Address:

Service Provider's Ph.:

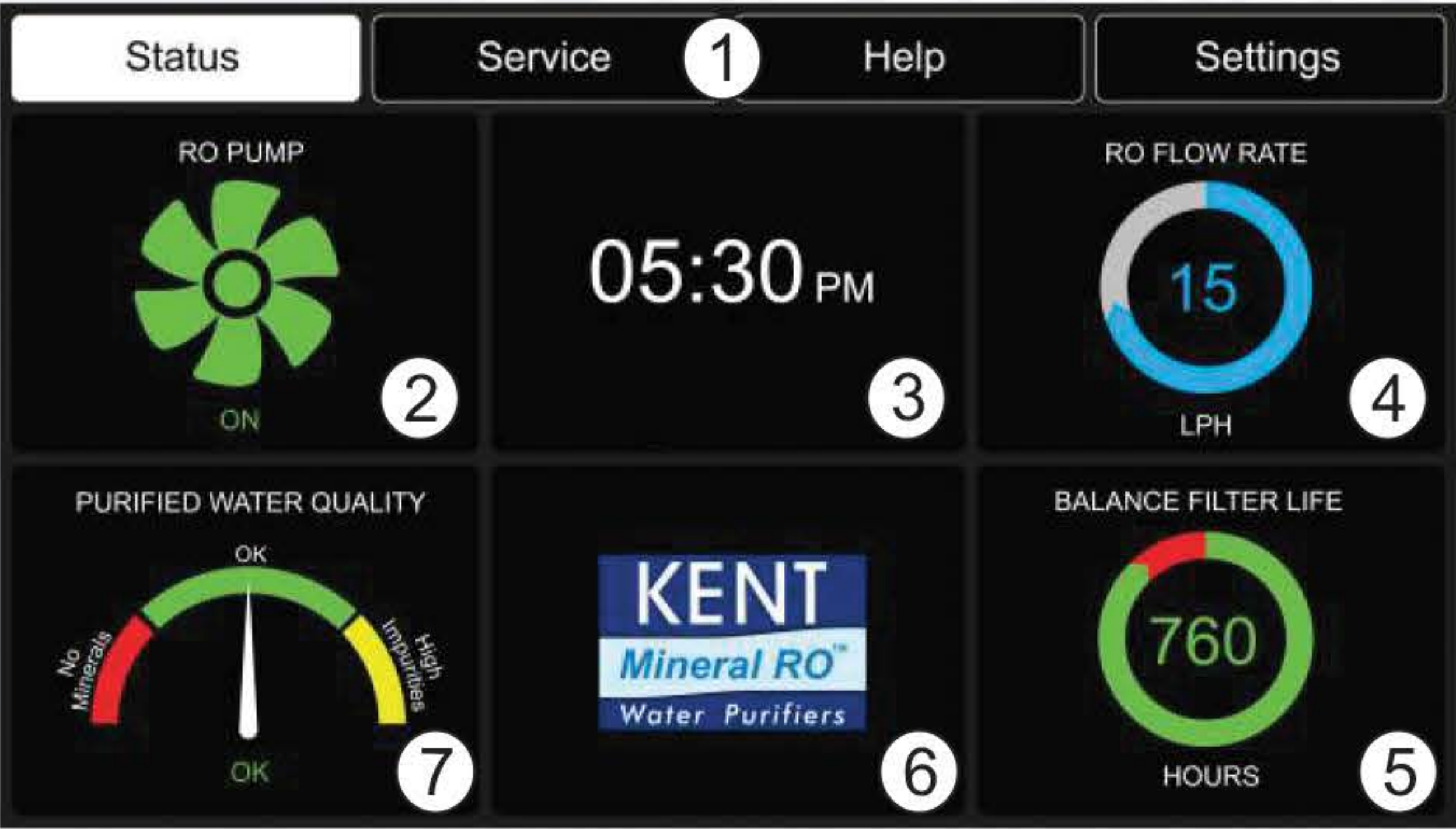
TDS of Raw Water:

Service Provider's Stamp:

By signing on this installation report, the customer hereby agrees to the terms & conditions of warranty mentioned on the back side of the warranty card.

KENT Smart RO Operations

Touch Screen Explained



- 1. Navigation Tabs
- 2. RO Pump Status
- 3. Time
- 4. RO Flow Rate
- 5. Balance Filter Life
- 6. Warning/ Ok display
- 7. Purified Water quality display

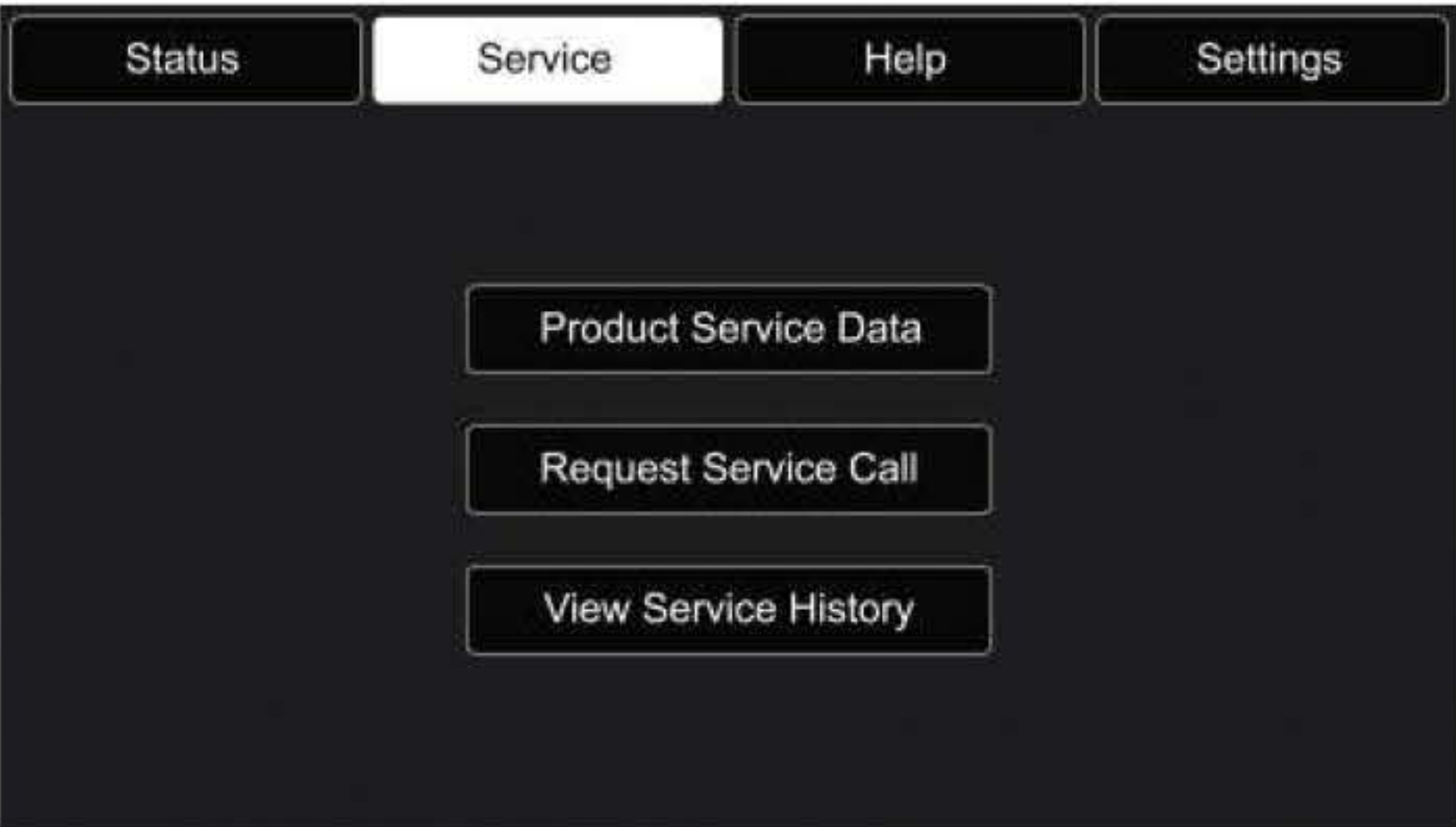
Navigation Tabs

i. Status Tab



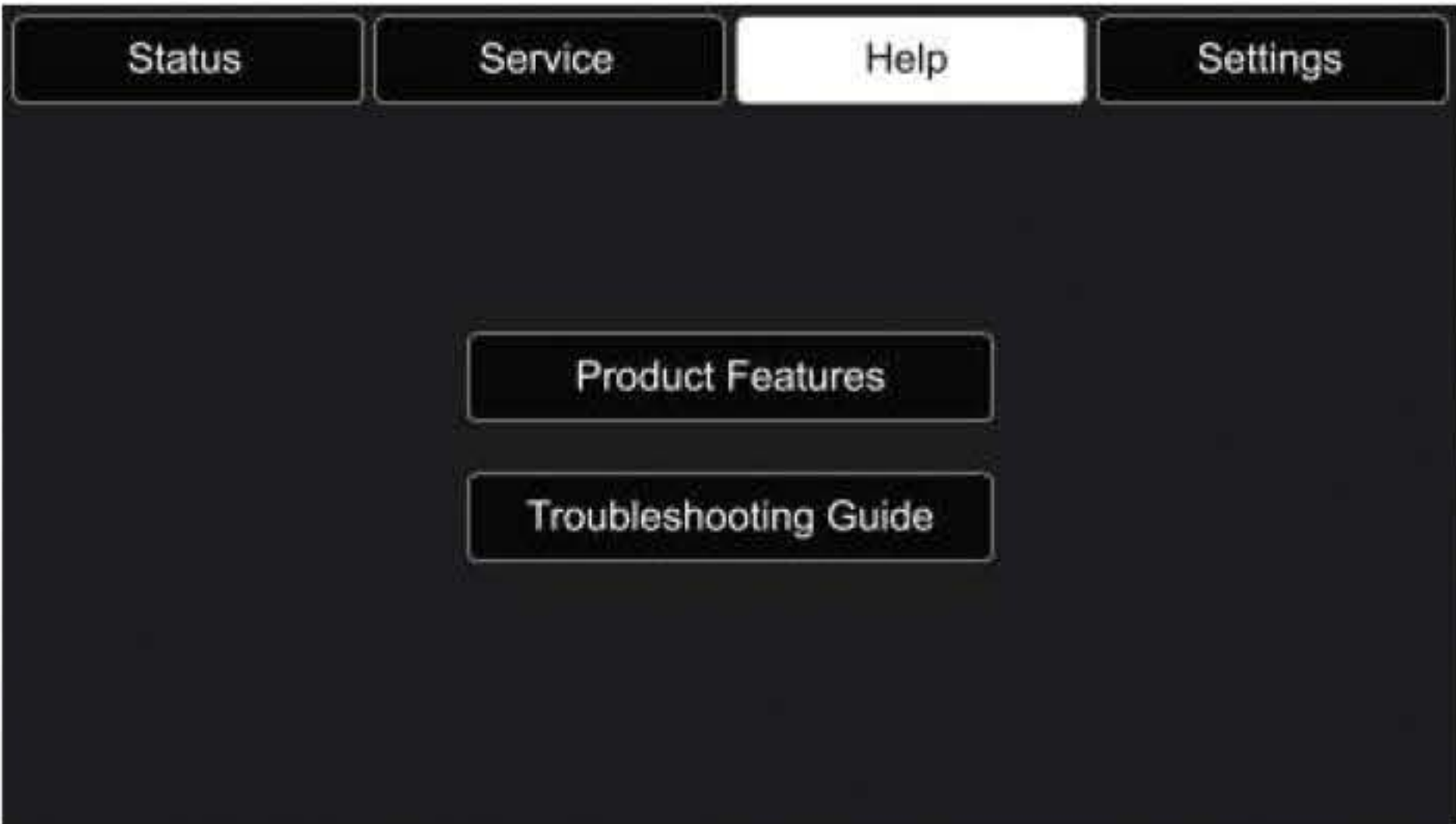
- Under normal workings conditions and without any fault, the users will be greeted with the screen as shown in the figure 1. Upon touching any display, the details would be displayed on full screen.
- When the storage tank gets filled the RO pump will turn off without flow rate. It would be indicated as shown in the figure 2.

ii. Service Tab



- In service tab, Product Service and product Installation details are entered during installation or during service.
- This section is for Service people or official purpose only

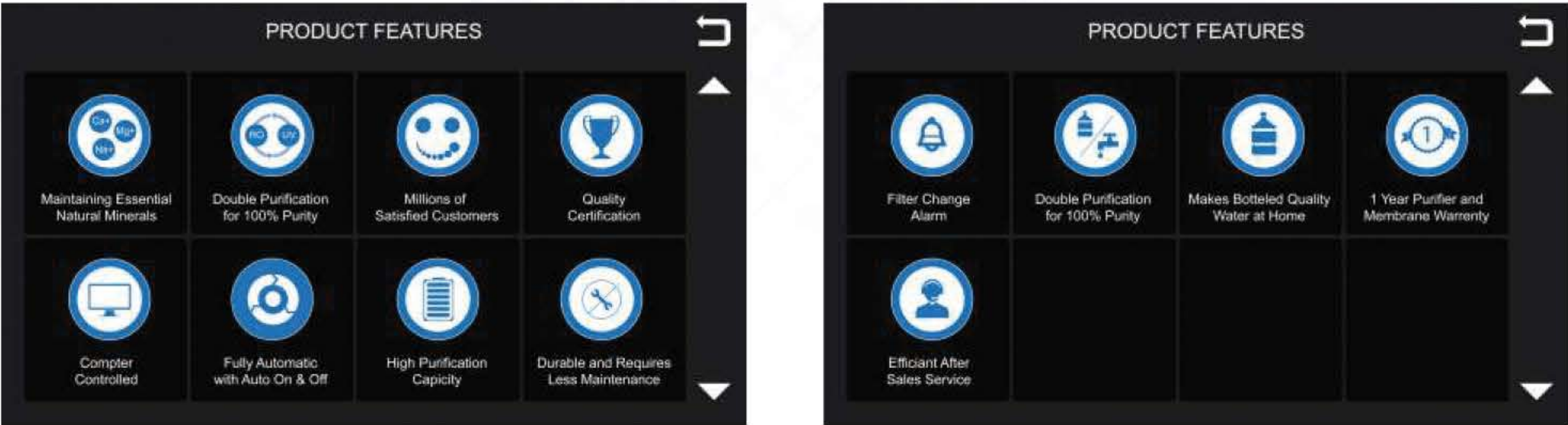
iii. Help Tab



- Help Tab has two sub men
 - a. **Product Feature:** Describes the product and its features.
 - b. **Troubleshooting Guide:** Lists and describes common faults and there remedies.

a. Product Features

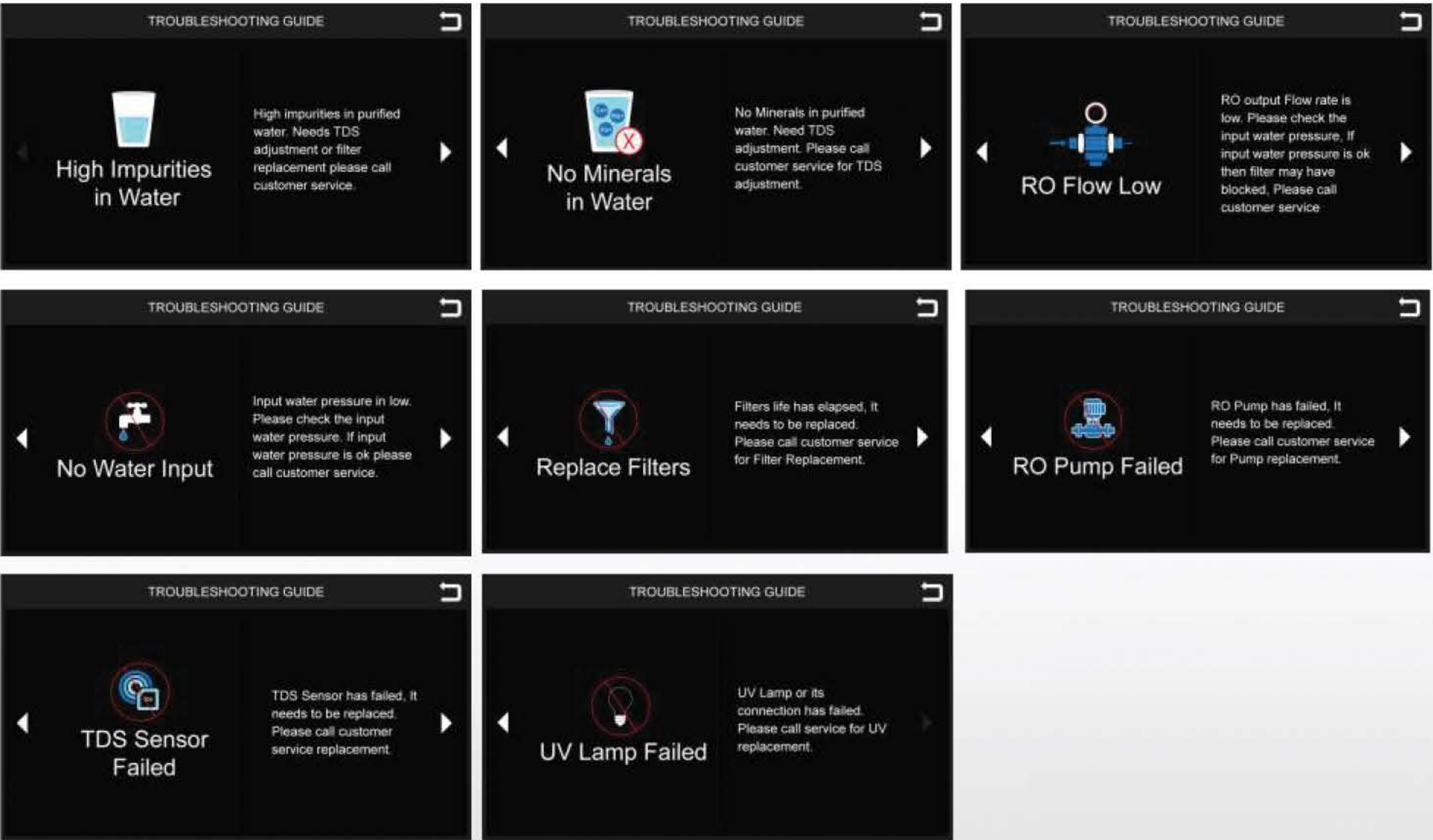
- Clicking on the product features sub menu will open a new window with features listed across. The screen displays 8 features (per screen), neatly arranged in the grid of 4 x 2.
- Scroll down to know about other features. Clicking on any one of the Icon will open a new window giving a detail of features selected.
- To move back to the previous screen, Click on the return arrow icon.



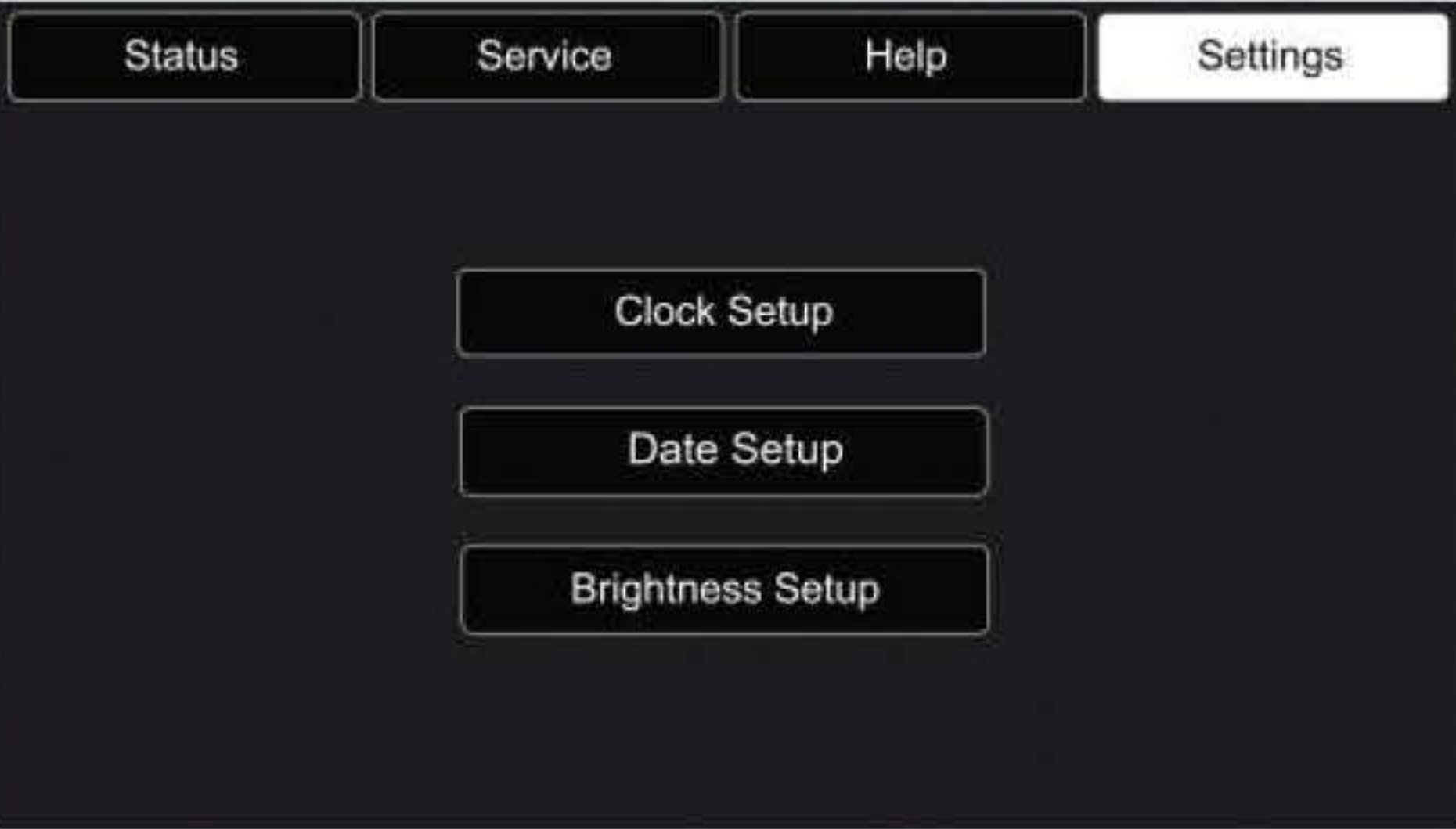
Note: If no input is provided for more than 30 seconds, the display will automatically reset to home screen.

b. Troubleshooting

- Clicking on the troubleshooting icon will open a new window listing out the most common faults and explaining each one in details.
- Use arrow button to move to the next screen.
- To go back to the previous menu, click the return arrow at any point of time.



iii. Settings Tab



Setting tab allows to set the Date, Time and customize display brightness as per requirement.

- a. Clock Setup
- b. Date Setup
- c. Brightness Setup

a. Clock Setup



To set time, click on the Clock setup once. A window will pop up as shown in the figure.

- Use the arrows to set the correct time.
- To save the time settings, press '**Save**' button on the interface once.
- Time saved message will pop up for 5 Sec., confirming that the settings has been saved.

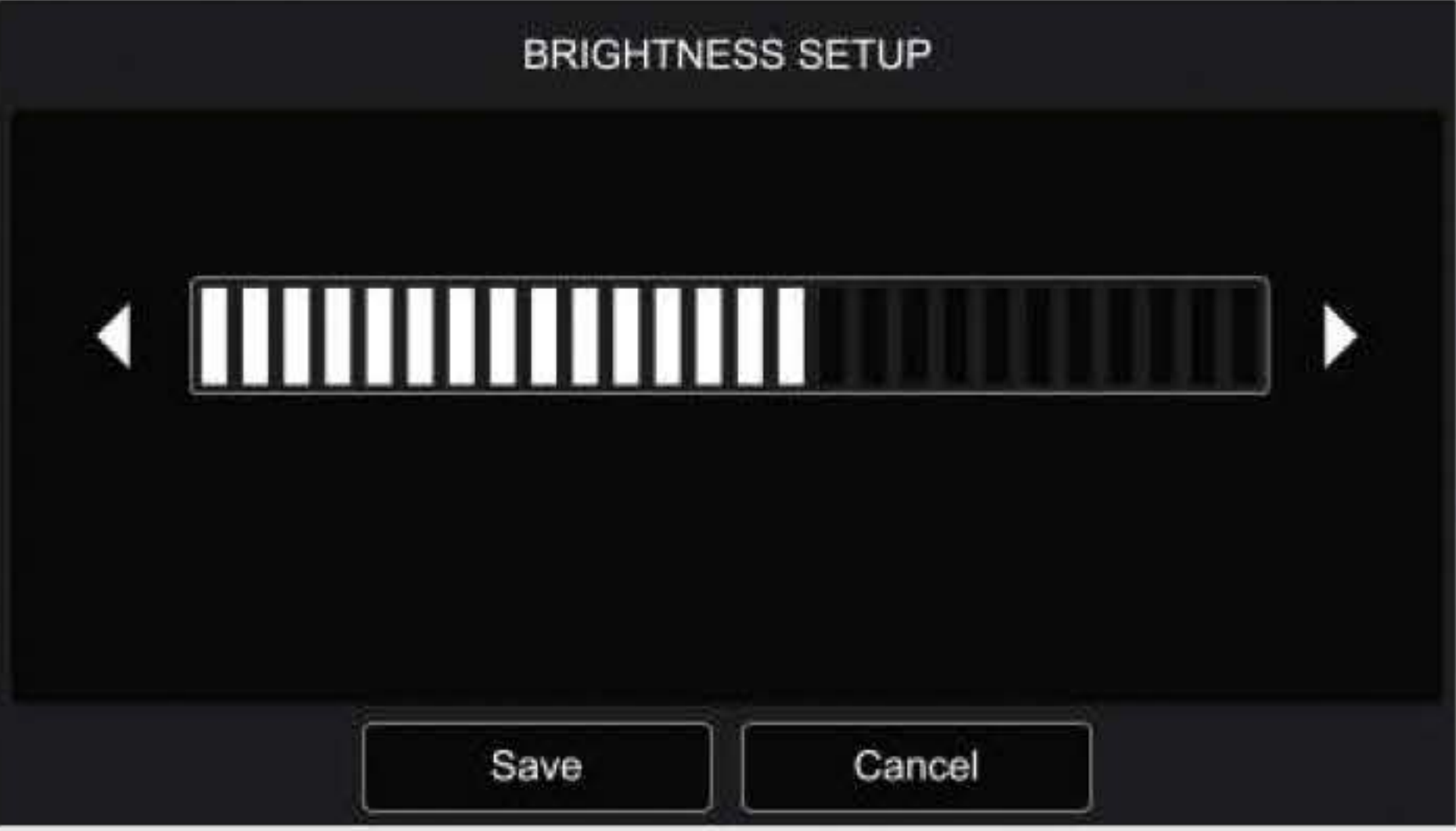
b. Date Setup



To set date, click on the '**Date Setup**' menu once. A window will pop up as shown in the figure.

- Use the arrows to move to the correct date.
- To save the date settings, press '**Save**' button on the interface once.
- Date saved message will pop up for 5 Sec., confirming that the settings has been saved.

c. Brightness Setup



Touch the '**Brightness Setup**' button to set brightness level.

- Brightness levels can be set in a range of 0 to 26.
- Brightness levels can be increased or decreased by pressing left and right arrow as shown below.
- After achieving the correct brightness level, touch the '**Save**' button to save the brightness level.
- To cancel brightness setting, touch the cancel button. The screen will run with previously set brightness levels.

Note: To go back to the settings menu click the return arrow or cancel button

Computer Controlled Operation

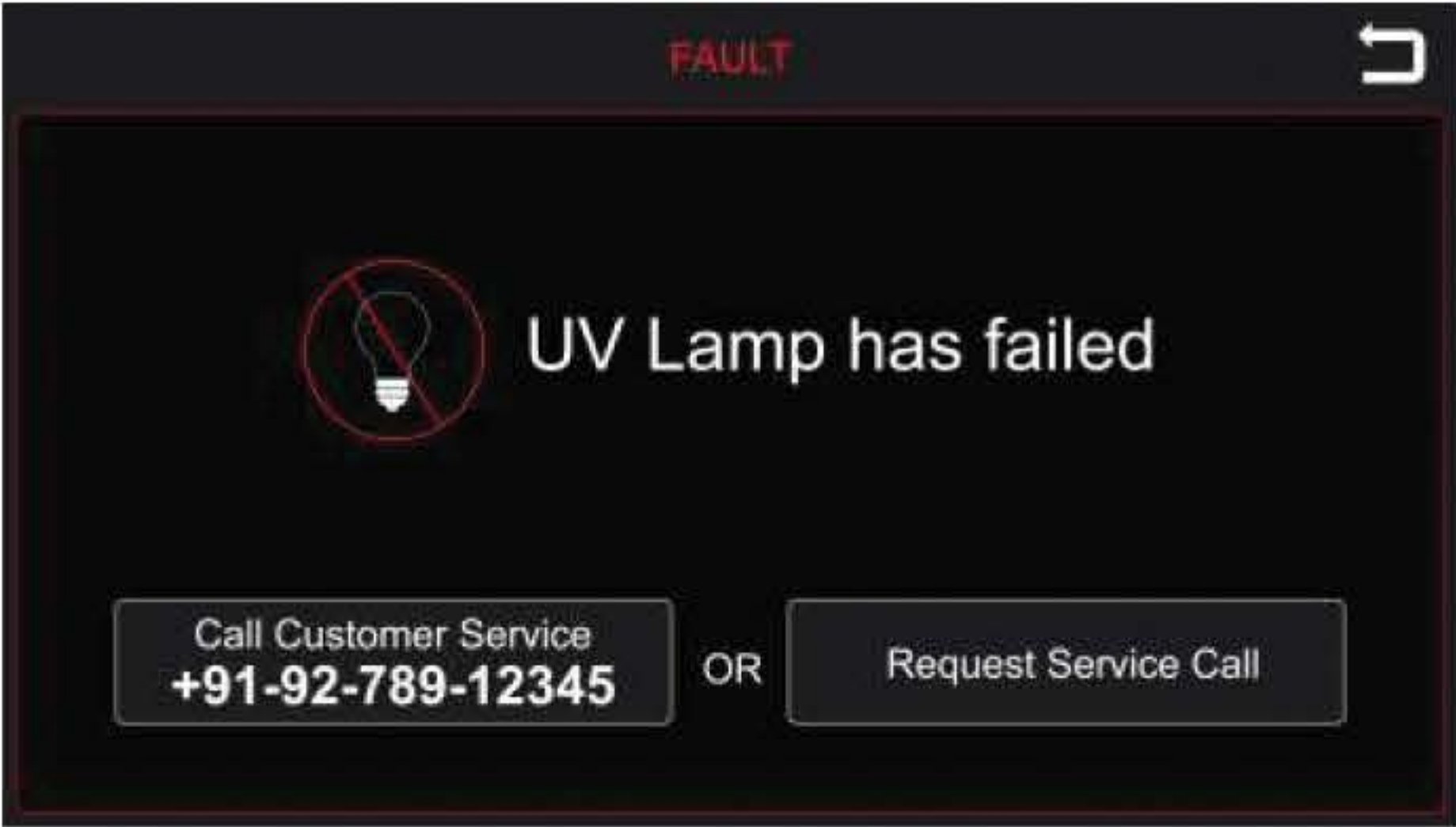
To ensure delivery of purer and healthier water, a micro-processor is installed in the purifier that performs the following functions:-

UV Stabilization Delay: To ensure that the UV lamp is pre-heated and is working at its optimum level before it starts disinfecting water, the controller provides a two seconds delay to UV lamp when the purifier is switched on. During this period, only the UV lamp is switched on and other electrical devices of the purifier are switched off.

Purification Delay: To ensure that the idle water lying in the internal pipes and in the UV chamber is disinfected before being passed into the storage tank, the system provides a 5 seconds delay when the purifier is switched on. During this time, the UV lamp kills all micro-organisms that may be in the water inside UV chamber. After this delay, all other electrical devices such as booster pump and solenoid valve are switched on to start normal purification process.

Alarm: To ensure delivery of purer water, KENT Superb in-built micro controller controls and senses various vital components and displays their status on the digital interface.

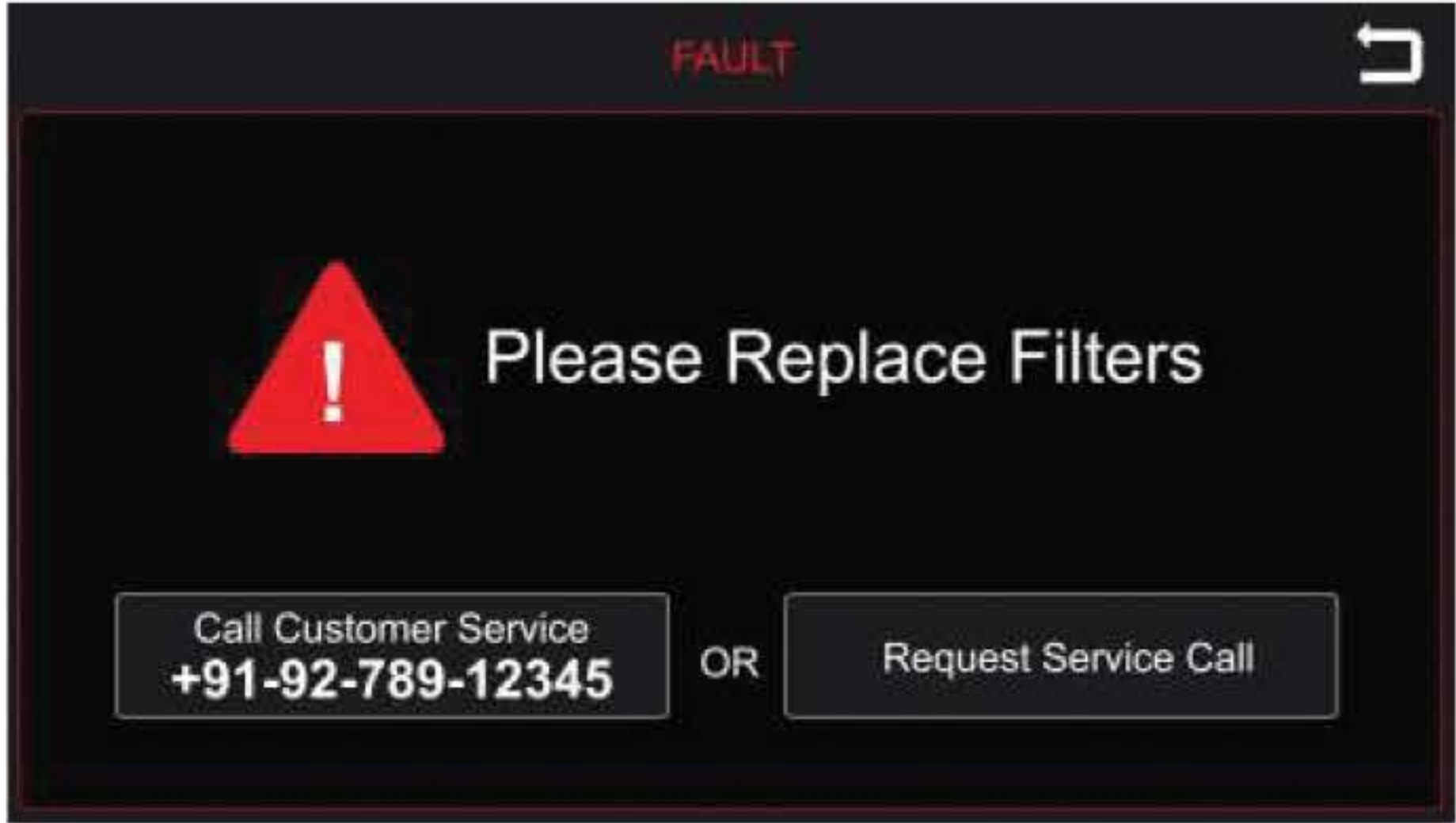
UV lamp Failure



KENT Superb Mineral RO™ Water Purifier is equipped with a safety feature, which displays a warning signal when and if the UV lamps fails or stops working. The purifier would stop purifying water till the UV lamp is not replaced.

If the interface shows UV failure message, switch off the purifier and call the service technician for help.

Filter Replacement



The in-built smart system will display a message, warning the user to replace filter when less than 60 hours of filter life is left.

On completion of filter life, 'Replace filter Message' will be displayed on the screen, and the purifier would stop purifying water till the filter is not replaced.

If the interface shows 'Replace Filter Message', switch off the purifier and call the service technician for help.

TDS in Purified Water

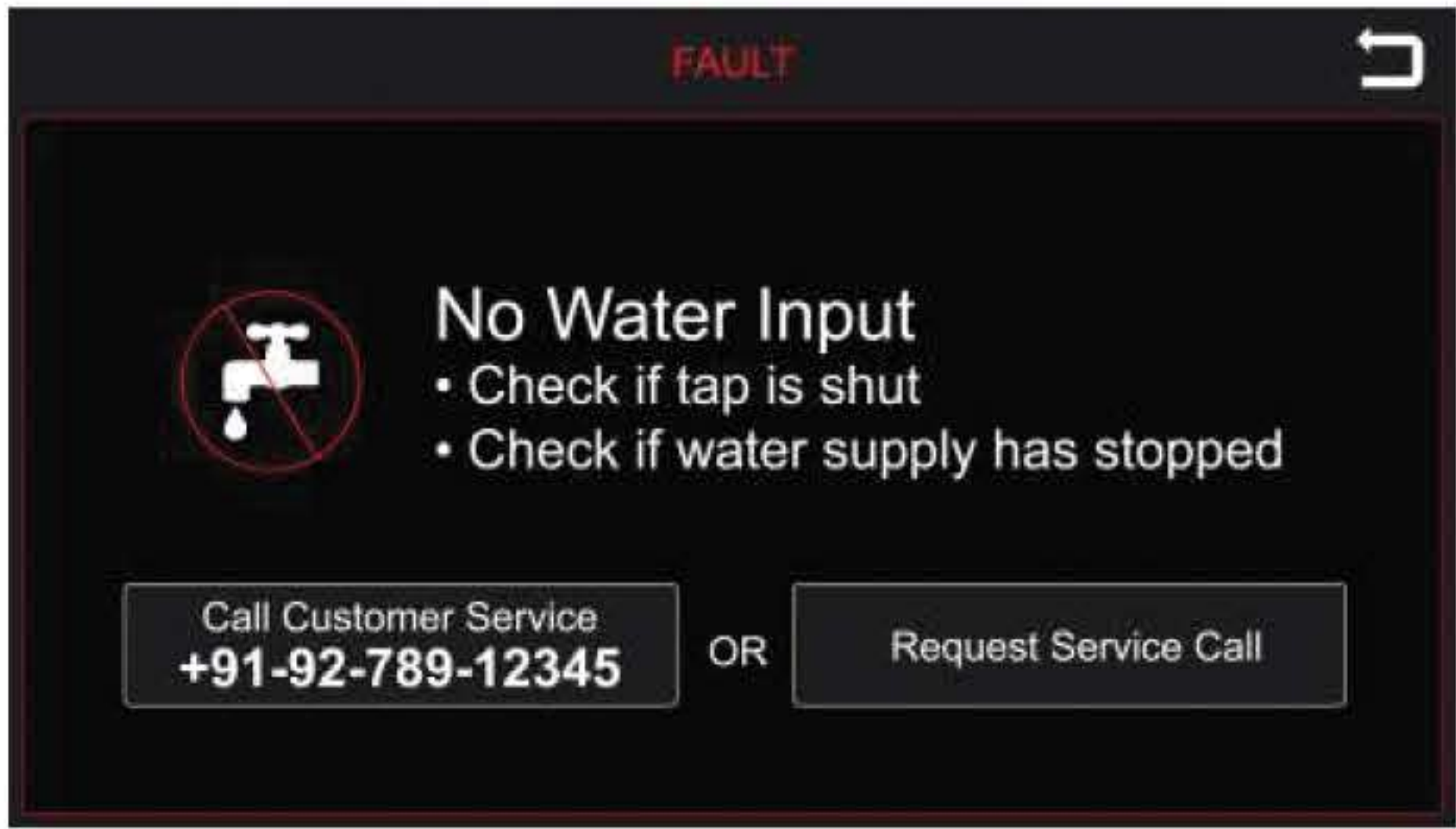


The system takes 2 to 3 minutes to sense the water quality.

- If the TDS levels in purified water is within the permissible limit, the interface would display it as '**OK**'.
- If the TDS levels in purified water is more than the permissible limit, a warning message will display '**High Impurities in Water**'.
- If the TDS levels in purified water is less than the permissible limit, a warning message will display '**No Minerals in Water**'.

Note: If the interface displays any warning, switch off the purifier and call the service technician for help.

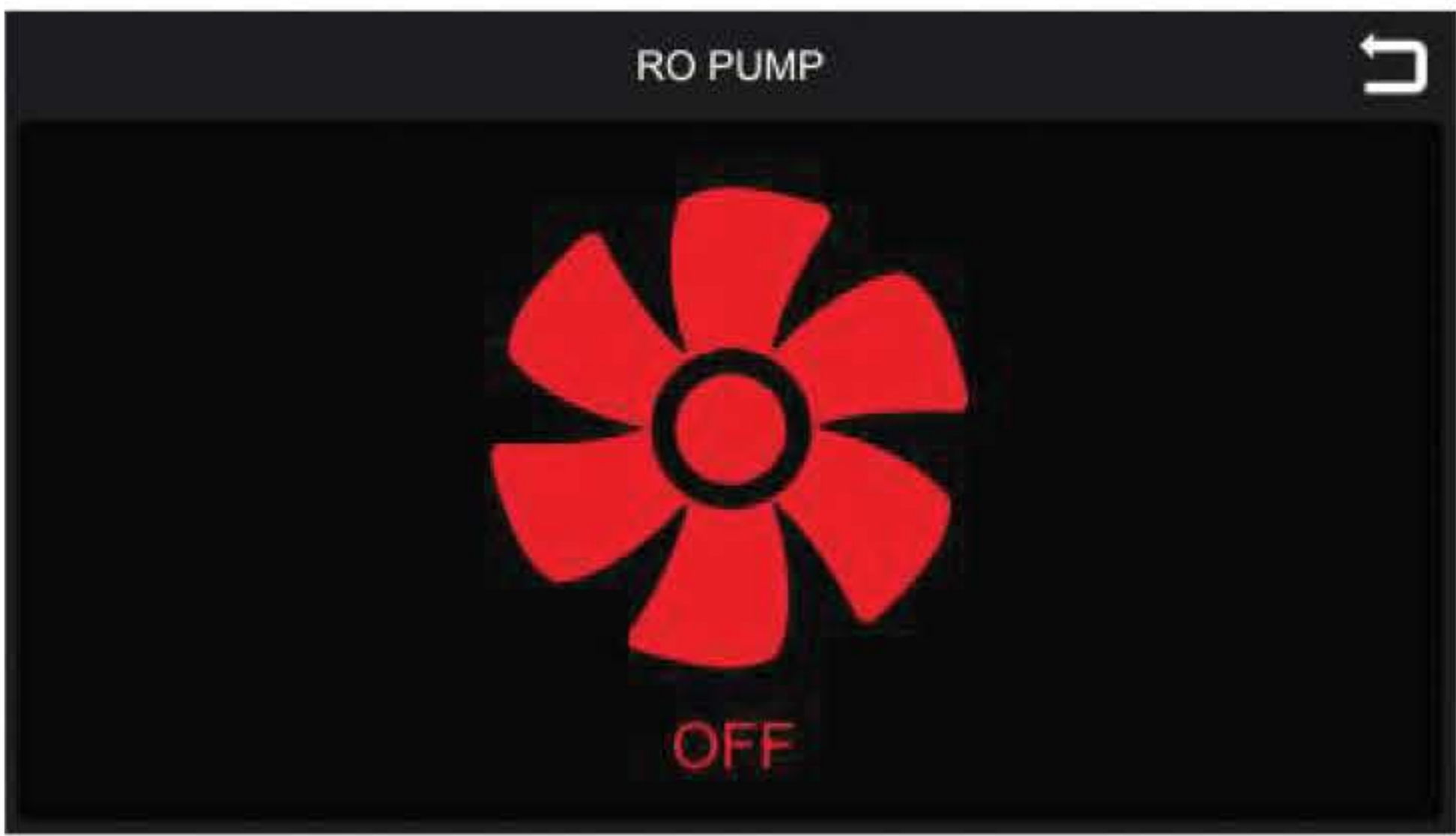
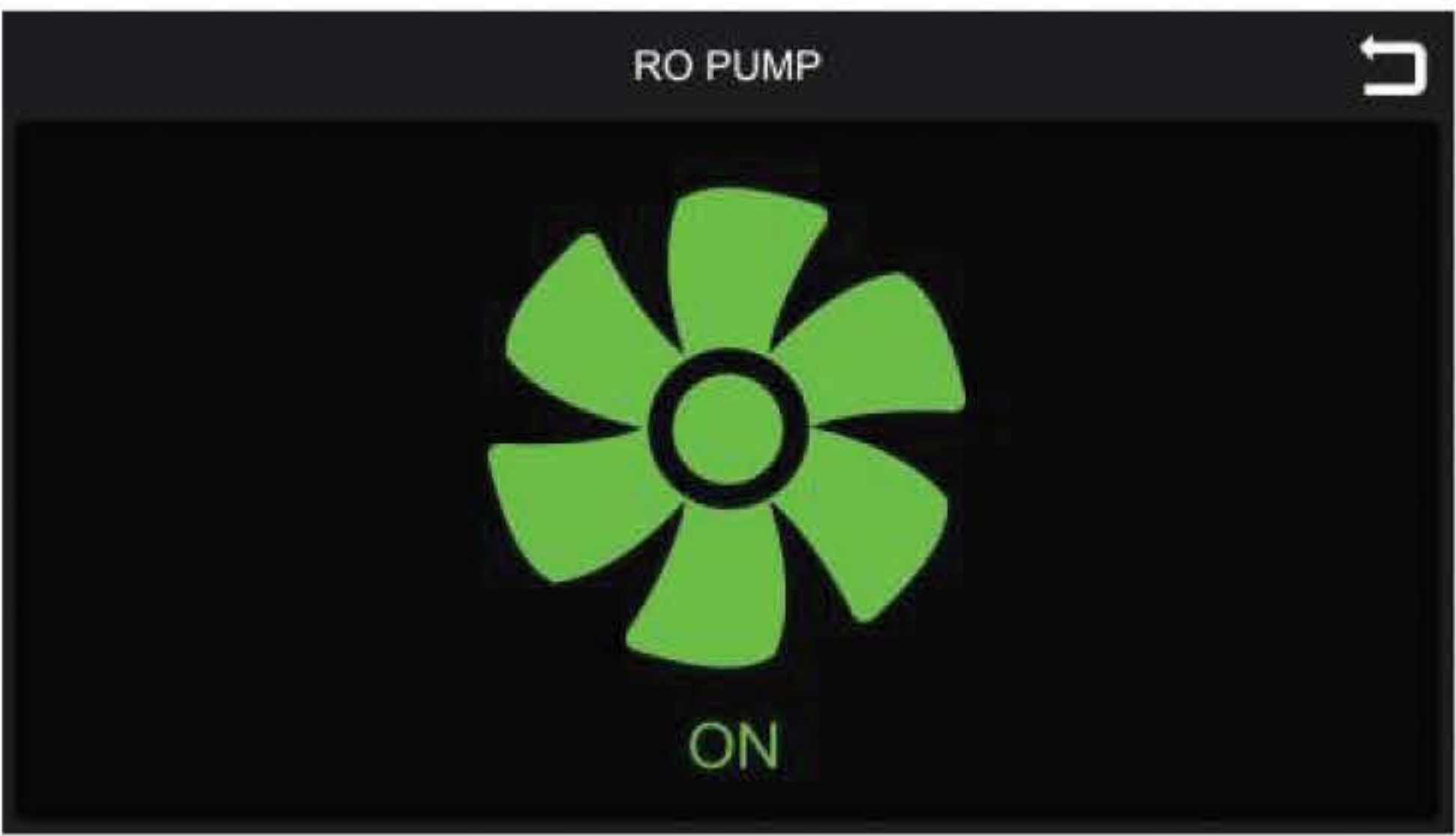
NO Water Input



KENT Superb Mineral RO™ Water Purifier will display a warning message in case there is no supply of water. The purifier will automatically shut off, till regular water supply is not restored.

In case the water supply is restored and the purifier still displays the warning sign, switch off the purifier and call the service technician for help.

RO Pump status display



KENT Superb Mineral RO™ Water Purifier will display a status of RO pump on real time basis.

- Whenever the RO pump is on and working, it would be displayed in '**GREEN Colour**'.
- When RO pump is off and not working, it would be displayed in '**RED Colour**'.

RO Flow Rate display



KENT Superb Mineral RO™ Water Purifier measures and displays RO Flow on real time basis.

- If the RO flow rate falls below the normal flow rate, the Smart System would show '**RO Flow Low**' warning.
- If there is a RO pump failure, the system would show '**RO pump has failed**' warning, and the purifier would shut down.

Note: If the interface displays any warning, switch off the purifier and call the service technician for help.

Automatic Operation

- The purifier automatically shuts off when the storage tank is full
- The purifier does not start when the inlet water supply pressure falls below 0.3 kg/cm²
- The purifier automatically restarts when water level drops below the maximum
- The purifier does not allow any water rejection in absence of electricity/when tank is full

Installation Instructions

The **KENT Superb** Mineral RO™ Water Purifier is a product of advanced technology, which ensures safe and clean drinking water. The purifier is easy and convenient to install.

Recommended Site Preparations :

- Single Phase 220 ± 10 V AC, 50 Hz connection not more than 3m away from the point of installation of purifier
- Raw water supply with ½ inch nipple not more than 3m away
- Drain for rejected water not more than 3m away
- Space as per dimensions of the purifier
- Wall/plane surface for mounting two screws and holding the machine
- The system and installation must comply with state and local laws & regulations

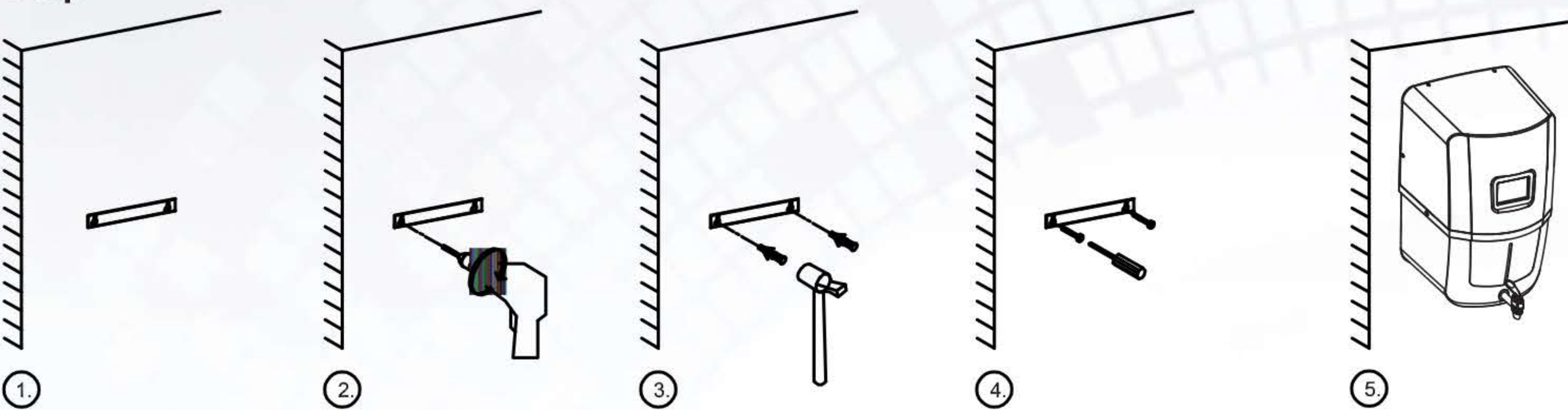
Specific Instructions :

- **KENT Superb** Mineral RO™ Water Purifier is a wall mountable purifier. Make sure that it is only mounted on a wall. Avoid installation on wooden and metallic stands.
- For optimum performance and minimum inlet pressure required, ensure that the raw water supply tank is at least 10 ft. above the purifier.
- It is preferable to install the purifier near a sink so that inlet and reject water lines are easily available.

Installation Procedure

Step-1

Wall Hanging Diagram



1. Paste the central drill sticker on wall at (3.6 Feet to 4.0 Feet from the ground) as per your convenience.
2. Ensure that sticker is pasted straight on the wall, then drill holes as per the space provided on sticker.
3. Now, insert the puff up with the help of a hammer.
4. Screw in two 10X50 self-taping screws, 7.6 inches (192 mm) apart horizontally.
5. Carefully hang the purifier on the wall with the help of wall-mounting slot holes provided on back side of the purifier.

Note: If the wall is not straight or the screws are not properly drilled in an even position, it will damage your purifier.

Note: Keep the device away from heat or direct sunlight.

Step-2

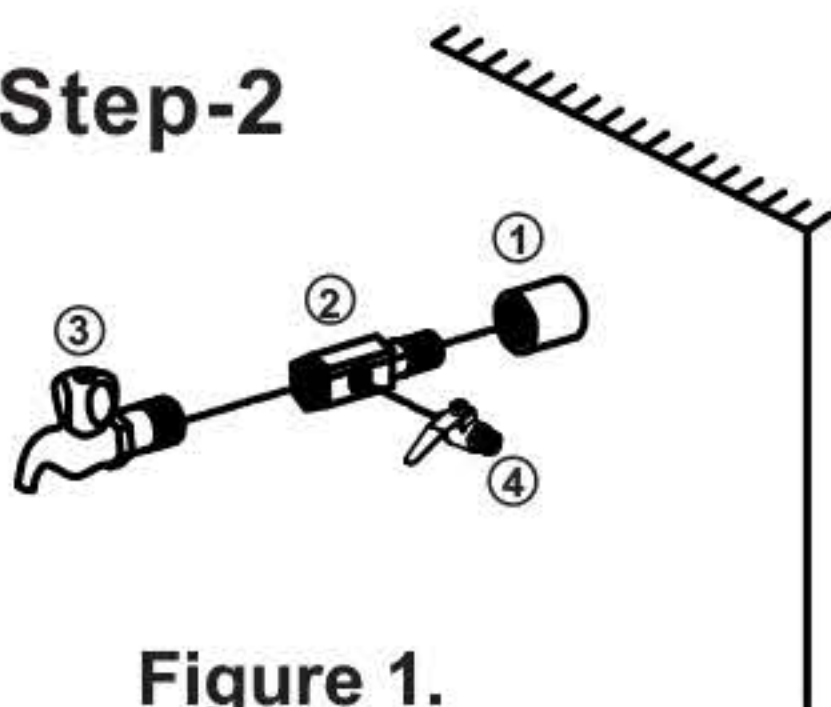


Figure 1.

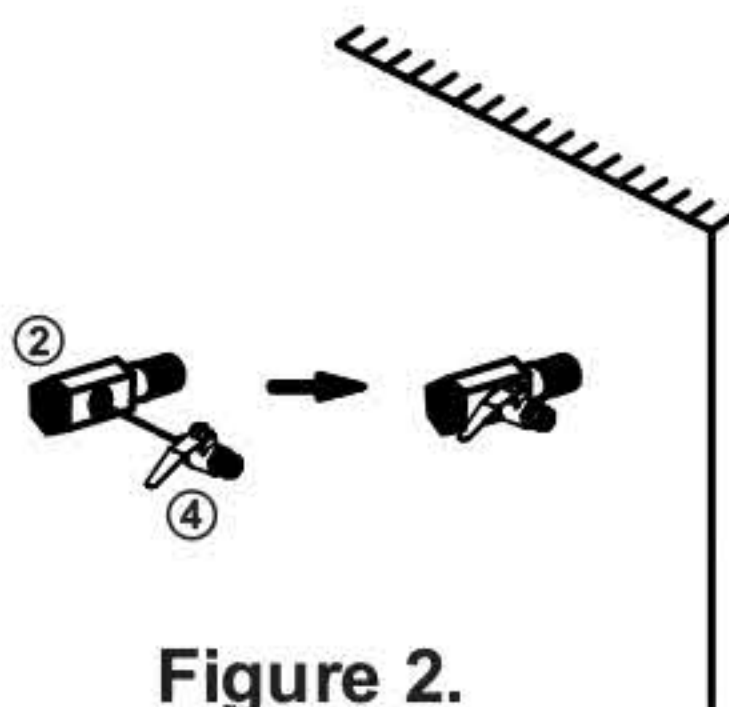


Figure 2.

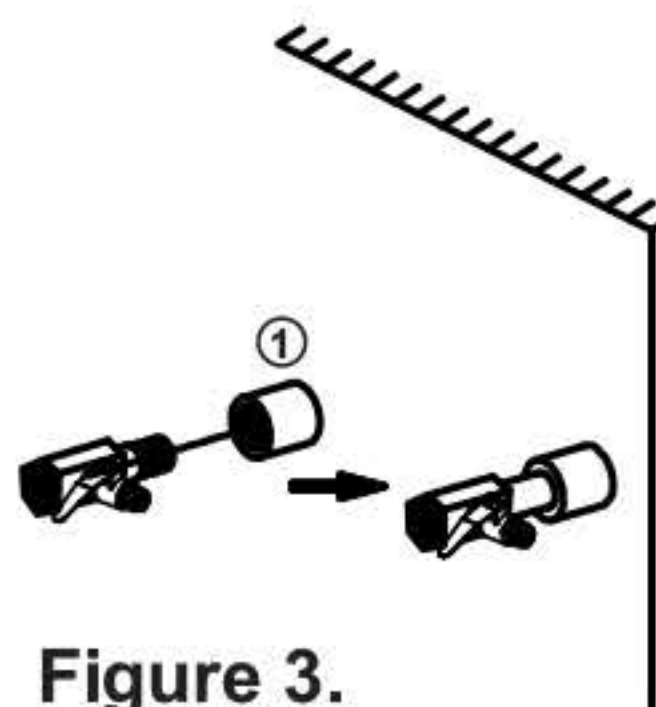


Figure 3.

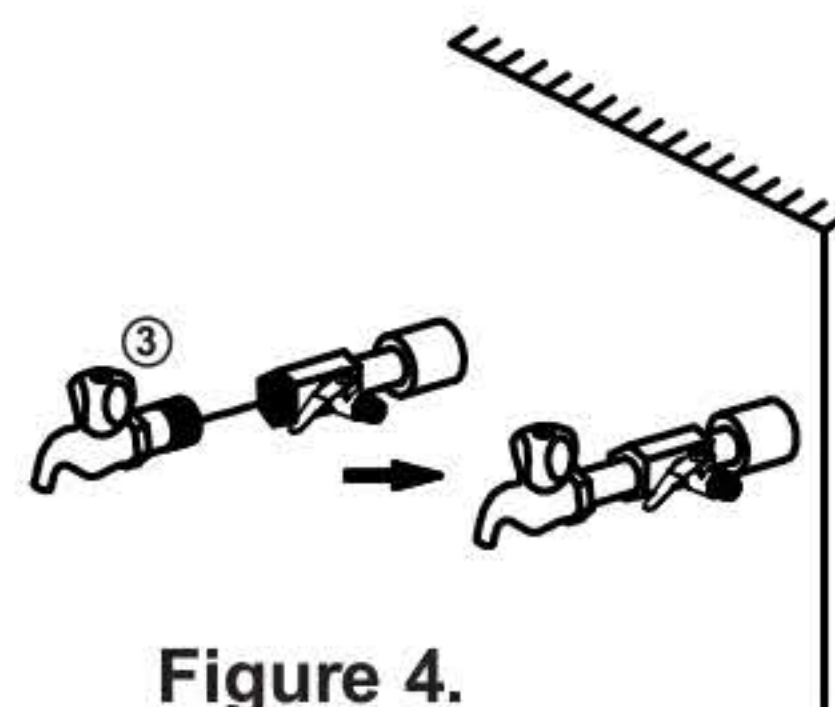


Figure 4.

1. First fix the SS ball valve (marked as no. 4) to the inch port of the 3-way connector (marked as no. 2) as shown in figure 2.
2. Connect the 3-way connector to the raw water supply (marked as no. 1) as shown in the figure 3. The 3-way connector is fitted in line with the raw water supply.
3. The other end of the 3-way connector can be connected to a tap (marked as no. 3) as shown in figure 4. or can be plugged off if not required.

Step-3

1. Now connect one end of the white pipe to SS ball valve and another end to the upper push-fit elbow fitting to the left hand side of the purifier labelled as WATER IN, as shown in fig 1.
2. Similarly, connect one end of the white pipe to the lower elbow fitting connector in tank labelled as REJECT WATER and leave the other end in the drain, as shown in fig 2.

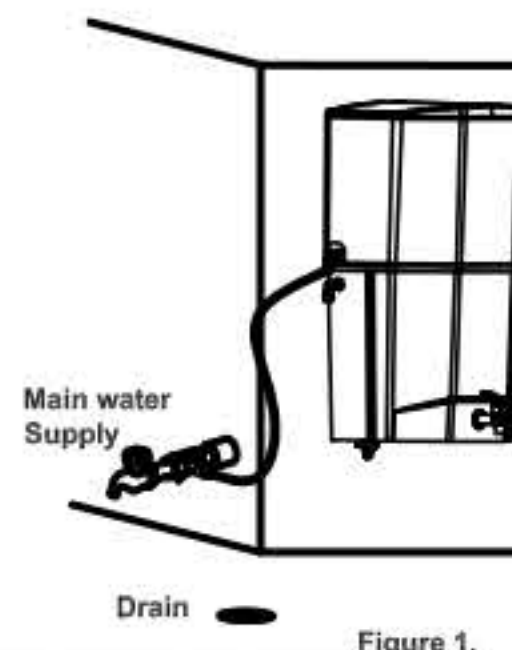


Figure 1.

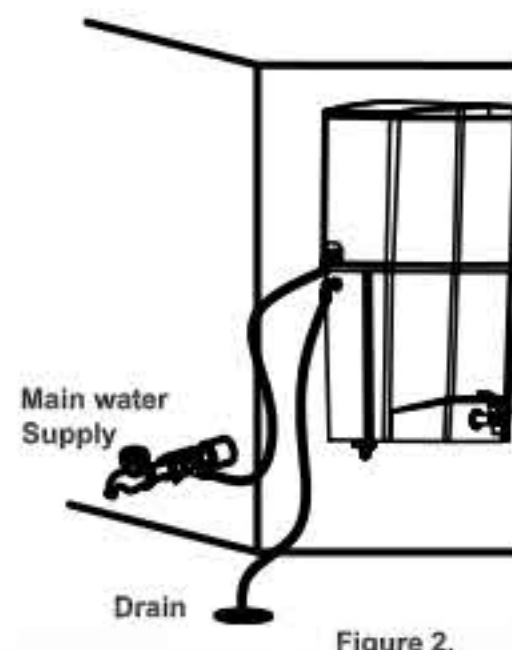


Figure 2.

Step-4

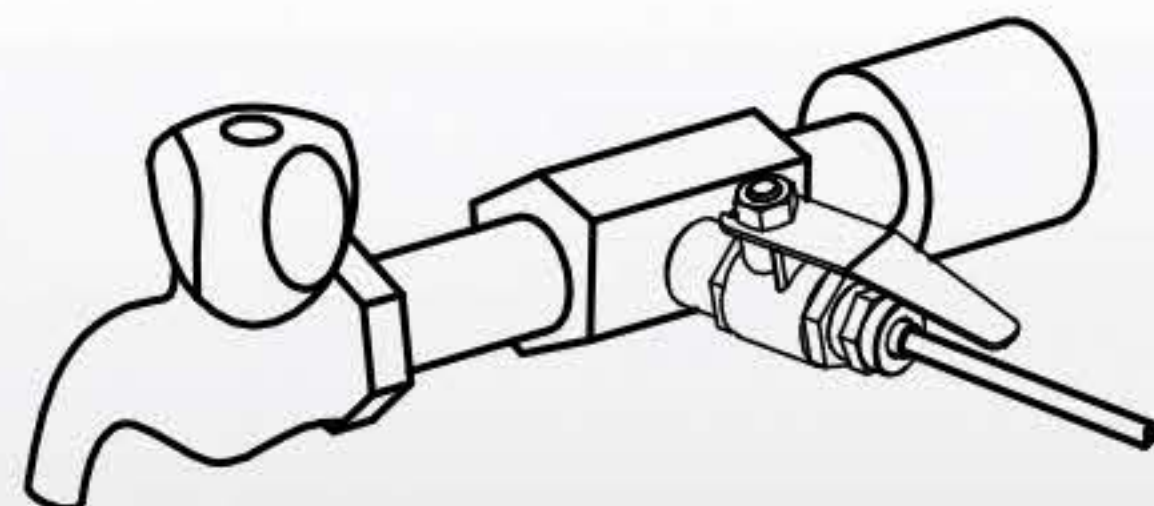
Before connecting the power supply, it is important that you perform the following functions:

1. Open the SS ball valve (Handle parallel to the ball valve) to start the flow of water into the purifier, as shown in the figure.
2. Wait for 2-3 minutes to ensure that the filters are soaked in water.

Step-5

Connect the power supply.

Installation is complete.



TDS Adjustment*

The unique TDS Control System enables customers to retain the contents of natural minerals (TDS) in purified water, as per their requirement.

- Turning the screw of the valve anti-clockwise results in an increased mineral content.
- Turning the screw of the valve clockwise results in a decreased mineral content.



We recommend keeping the TDS at lowest but not below 50mg/l.

Starting Up the Purifier

- Switch on the power supply.
- Wait till the storage tank completely fills up.**
- Switch off the power supply.
- Drain the storage tank by opening the drain plug present at the bottom of the storage tank, so as to remove any dust particles present in the pipes and storage tank.
- Close the drain plug and switch on the power supply.
- The purifier is ready to use.

Recommended Uses of Rejected Water

Although the rejected water has high concentration of salts, it can be used for gardening purposes. It has high concentration of salts and minerals which accelerate

plant growth. Rejected water can also be used for cleaning purposes, i.e. cleaning utensils, mopping, etc.

Maintenance

To ensure that the purifier operates at its optimum level, a routine maintenance must be performed. The frequency of the maintenance will greatly depend upon the raw water quality and consumption of treated water.

- Storage tank must be drained once in 2 weeks. To do so, switch off the power supply, open the drain plug at the bottom of the tank and allow the water to drain. Then, screw back the plug and switch on the power supply.
- Replace sediment, activated carbon and post carbon when the filter change alarm is audible, or after every 12 months. It is recommended to change the FRT when the filters are replaced.
- Replace the RO membrane once every year.
- Replace the UV Lamp once in a year.
- If you are not going to use the purifier for a long time (in case you are on a holiday, tour or out of home), make sure that you disconnect the power supply, turn off the raw water supply and drain the storage tank.

* Tested & Certified by TUV-SUD South Asia (P) Ltd.

** Tested or certified flushing time - 24hrs.

The reverse osmosis system contains a replaceable treatment component critical for the effective reduction of total dissolved solids and that product water shall be tested periodically to verify that the system is performing properly.

Replacement of spare parts are as under:-

-20010	SP	Inline Sediment Filter 8"
-20009	SP	Inline Carbon Filter 8"
-20002	SP	RO Membrane Welded 8"Housing
-20015	SP	Post Carbon Filter (Blue)
-20003	SP	Hollow Fibre Membrane (RO)
-20018	SP	FRT 550

Note: Filters and membranes are consumables. Their replacement time is dependent on the quality of raw water and water consumption. They are not covered under the warranty. However, if a filter chokes within six months and membrane within a year, it will be cleaned/repared/replaced free of cost. Changing the filters and system inspection is available on call. The treatment capacity of RO membrane will reduce with time due to clogging of membrane pores.

“This reverse osmosis system contains a replaceable component critical to the efficiency of the systems. Replacement of the reverse osmosis component should be with one of identical specifications as defined by the manufacturer, to ensure the same efficiency and contaminant reduction performance.”

Recommendation for optional Pre-filter installation



X No

If water comes from municipal supply or from an overhead tank.



✓ Yes

If water comes from bore-well or it contains heavy sediment particles.

For best results must use only KENT's Genuine Pre-filter

Technical Specifications

MODEL NAME	KENT Superb
Model No.	11037
Product	Water Purifier With Ultra Violet Disinfection
Applications	Suitable for Purification of Brackish/Tap Water/ Municipal Corporation Water
Purification Production Rate	15L/hr. or 0.25L/min*
Body Material	ABS Food Grade Plastic
Mounting	Wall Mounting
Dimensions(mm)	L 410 W 260 H 520
Inlet Water Pressure/Temp (Min)	0.3 kg/ cm ² or 4.267psi/ 10° C
Inlet Water Pressure/Temp (Max)	3 kg/ cm ² or 42.67psi/ 40° C
Filter Cartridge	Sediment, Carbon Block Filter, UF and Post Carbon
UV Lamp Wattage	11W
Life of UV Lamp	1 Year
Weight	8.600 kg.
Storage Capacity	9L
Maximum Duty Cycle	75L/day
Membrane Type	Thin Film Composite RO
Booster Pump Voltage	24V DC
Total Power Consumption	60W
Input Power Supply	Single Phase 220 ± 10V AC, 50Hz ☐

* Treatment capacity tested for tap water having TDS level of 750ppm at room temperature

KENT
Mineral RO™
Water Purifiers
HOUSE of PURITY



Innovations for
Better Living

Marketed by:
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Manufactured by:
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For customer complaints, contact customer care officer at:
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