



**100% RO**  
Zero Compromise

**PURE&SURE™**  
SUPERIOR TECHNOLOGY FOR ADVANCED PROTECTION.





Dear Customer,

Congratulations and welcome to A. O. Smith family.

We thank you for the trust you have shown in choosing the A. O. Smith water purifier.

A. O. Smith water purifier is one of the most advanced RO water purifier available in the market today. It is specially designed keeping in mind today's water quality and your needs.

Millions of customers all over the world trust A. O. Smith Products for their quality and workmanship.

Our customer-centric approach manifests itself in many other ways too. If you need any information or assistance with your water purifier, just call A. O. Smith authorised distributor

Please go through this simple and easy to read instruction and installation manual to get the best out of your A. O. Smith RO water purifier.

We once again thank you for choosing A. O. Smith.

Yours Sincerely,

Team A. O. Smith

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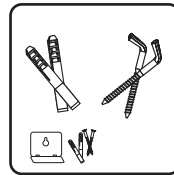
## What's in the box?



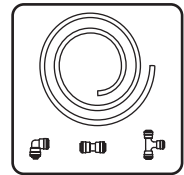
Water Purifier



User Guide



Mounting Accessories



Tube & Connectors

## Key Features of your A. O. Smith S7 water purifier



### PURITY THROUGH 7 STAGE PURIFICATION

7S TECHNOLOGY: Pre-filter + Sediment filter + Pre Carbon filter + Patented Side Stream RO Membrane + MIN-TECH (Mineraliser Technology) + Silver Activated Post Carbon + SCMT (Silver Charged Membrane Technology). In A. O. Smith RO water purifiers 100% of the water passes through the RO membrane.



### ADVANCE PATENTED SSM TECHNOLOGY (SIDE STREAM RO MEMBRANE)

Suitable for water with low and high (upto 2000 ppm) TDS. Wastes less water and improves pure water recovery.



### RO + SCMT (SILVER CHARGED MEMBRANE TECHNOLOGY)

SCMT is an additional stage of purification to prevent any potential secondary microbial contamination post RO purification. Double protection ensures purified and healthy water.



### MIN-TECH (MINERALISER TECHNOLOGY)

The MIN-TECH (Mineraliser Technology) adds essential minerals to the water. This ensures that the water tastes fresh and natural and has balanced pH – an essential requirement for drinking water.



### TWIN ADVANCE ALERT TECHNOLOGY

For Sediment + Pre Carbon filter and RO membrane + other filter change.



### ADVANCED PRE-FILTER & SEDIMENT FILTER

For effective removal of suspended solids and sediment from water and to ensure better life of RO membrane.



### CONVENIENCE

Provision for both wall mounting & table top.



### DIGITAL

Digital display for simple and intelligent display of information.



### LARGE STORAGE CAPACITY

Purified water storage capacity of 9 litres.



### WQA CERTIFIED RO MEMBRANE

RO Membrane element in A. O. Smith water purifiers is tested and certified by WQA against NSF/ANSI 58 standards for material requirements.

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## Pre-instruction Literature

### On Receipt

It is our policy to promote safe delivery of all orders. This product shipment has been thoroughly checked, packed and quality certified before leaving our plant.

### Visible Loss or Damage

If any of the goods called for on the bill of lading or express receipt are damaged or the quantity is short, do not accept them until the freight or express delivery agent makes an appropriate notation on your freight bill or receipt.

### Concealed Loss or Damage

When a shipment has been delivered to you in apparent good condition, but upon opening the crate or container, loss or damage has taken place while in transit, inform the carrier's agent / A. O. Smith authorised distributor immediately.

### About this Manual

This manual is a guide to good practice for operating and periodic maintenance of the A. O. Smith **S7** water purifier.

Do not operate before reading manual supplied with this product.

Please follow instructions in this manual to ensure personal safety and proper operation of this product. A. O. Smith assumes no liability for installation or servicing performed by any unauthorised personnel. Always install, operate, inspect and maintain this product in accordance with all applicable standards. Please store this user manual carefully for any future reference.

# General Instructions

## Safety

Your safety and the safety of your loved ones is paramount to us. There are several safety related messages in this manual, which have been provided during various stages such as installation, operation and maintenance of your A. O. Smith **S7** water purifier. These messages point out potential hazards and also educate on how to reduce any potential risks. Please always read and follow all safety messages as provided in this manual.



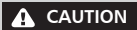
This is the safety alert symbol. This symbol alerts you to potential hazards that can hurt you and others. All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING".



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

### IMPORTANT

These instructions have been written as a guide for the proper installation and operation of your A. O. Smith **S7** water purifier. A. O. Smith will not accept any liability where these instructions have not been followed. However, for your safety and to avoid damage caused by improper installation, it is recommended that water purifier must be installed by A. O. Smith authorised distributor only.

Before proceeding with the installation instructions:

1. Inspect the A. O. Smith **S7** water purifier and its component parts for possible damage. **DO NOT** install or attempt to repair any damaged component parts. If you detect any damage in your A. O. Smith **S7** water purifier please contact A. O. Smith authorised distributor.
2. Verify that the voltage being supplied corresponds to that which is mentioned in the A. O. Smith **S7** water purifier manual.

## Introduction

A. O. Smith **S7** water purifier uses one of the latest technologies that is used in water purification process. A. O. Smith **S7** water purifier works under the principle of RO (Reverse Osmosis) technology which is found to be one of the most effective process. In this process water under pressure is passed through a semi-permeable membrane. Purified water is collected for drinking in a storage tank and impurities in the water are flushed to the drain.

### Why water purification is important?

Water purification, today is essential due to the presence of harmful contaminants present in the water supply. Rapid urbanisation and speedy industrial growth have led to significant pollutants and contaminants being found in the water supply. Below is a list of some of the harmful contaminants found today in the water supply which if consumed in excess can be detrimental to human health.

- TDS (Total Dissolved Solids) like Nitrates, Chlorides, Sulphates etc.
- Pesticides and VOC (Volatile Organic Compounds).
- Heavy metals like Mercury, Arsenic, Lead, Chromium, Cadmium etc., imbalanced pH.
- Microorganisms such as pathogenic bacteria, virus, protozoa and cysts.

A. O. Smith **S7** water purifier removes excessive TDS (Total Dissolved Solids) in water by more than 95%. A. O. Smith **S7** water purifier reduces heavy metals, removes pathogens and balances the pH value. By this, it ensures you safe and great tasting water.

### How does the A. O. Smith **S7** water purifier work?

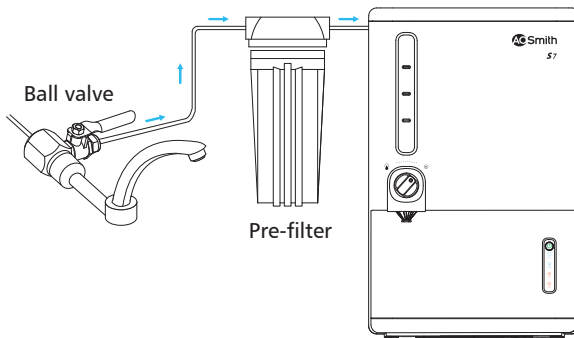
A. O. Smith **S7** water purifier has 7 stages of purification system, wherein the water is passed through the various stages and progressively filtered to get purified water which is stored in the inbuilt storage tank.

- **Stage 1 – Pre-filter**  
The Pre-filter is used to remove physical contaminants such as dirt, dust, soil particles, turbidity present in the water. This improves the life of the Sediment filter.
- **Stage 2 – Sediment filter**  
The Sediment filter is used to remove fine and coarse physical contaminants present in the water. This improves life of the Pre Carbon filter and ensures efficient working of RO membrane.



- **Stage 3 – Pre Carbon filter**  
The Pre Carbon filter uses carbon block with high adsorbption capacity which reduces harmful chemicals including pesticides, volatile organic compounds, residual chlorine etc., from water. It also adsorbs bad taste and odour causing organic compounds from water.
- **Stage 4 – RO (Reverse Osmosis) membrane**  
RO membrane contains semi-permeable membrane wherein the water is passed through the semi-permeable membrane to remove TDS (Total Dissolved Solids) and heavy metals like mercury, arsenic, lead, chromium, cadmium etc. It also removes disease causing microorganisms like bacteria, virus, protozoa and cysts.
- **Stage 5 – MIN-TECH (Mineraliser Technology)**  
The MIN-TECH contains Calcium and Magnesium minerals which helps to improve the taste and quality of water. It adds the required essential minerals back to water and balances the pH of water.
- **Stage 6 – Silver Activated Post Carbon**  
Water is passed through Silver Activated Post Carbon which acts as polisher and enhances the taste of water.
- **Stage 7 – SCMT (Silver Charged Membrane Technology) filter** In the final stage water is passed through SCMT filter which ensures double purification of water making it Pure & Sure for drinking.

**Figure 1**

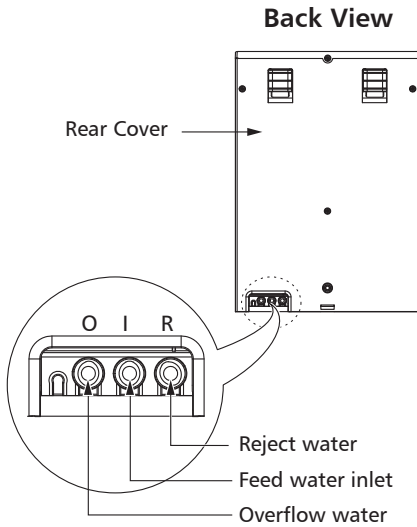
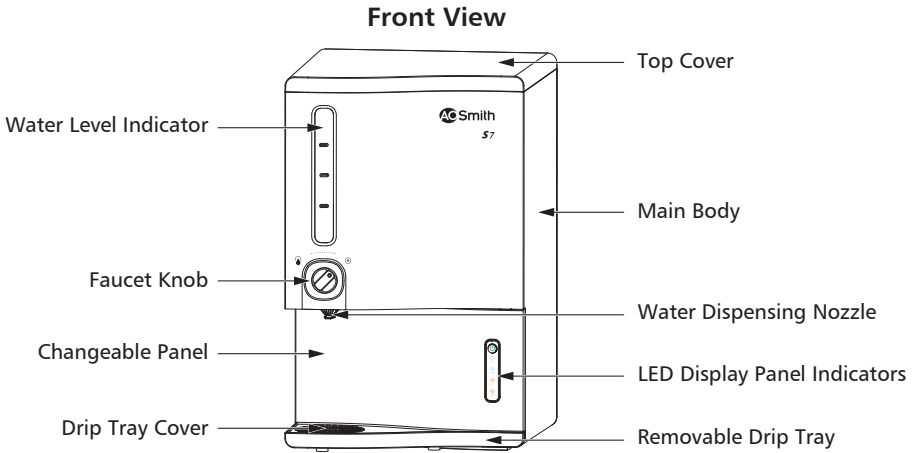


**Note:** The Pre-filter and the Ball valve comes along with the product as standard accessories.

# Product Overview

## A. O. Smith S7 water purifier

Figure 2



LED Display Panel Indicators

## Function of Indicators

### Power Button

This button is used to switch ON/OFF the water purifier.

- When there is a leak in the water purifier, the power button starts to blink with continuous beep till it is fixed.
- When the water pressure is lower than required water pressure limits, the power button starts to blink continuously with beep sound for 10 seconds till the water pressure becomes normal.

**Note:** Call A. O. Smith authorised distributor if you notice continuous blinking of Power light.

### Tank full indicator

This indicates that the water purifier tank is full.

- When there is an overflow the indicator starts to blink with continuous beep till it is fixed.

**Note:** Call A. O. Smith authorised distributor if you notice continuous blinking of Tank full indicator.

### Auto flush indicator

This indicates flushing is in progress. Every time the water purification process is activated the auto flushing mechanism cleans the RO membrane. It enhances the life of RO membrane.

**Note:** Call A. O. Smith authorised distributor if you notice continuous blinking of Auto flush indicator.

## RO change indicator

This indicates that the MIN-TECH, Silver Activated Post Carbon, SCMT filter and/or RO membrane needs to be replaced.

- RO change indicator glows when 10% life is remaining, indicating that it is time to replace MIN-TECH, Silver Activated Post Carbon, SCMT filter and/or RO membrane.
- When MIN-TECH, Silver Activated Post Carbon, SCMT filter and/or RO membrane life reaches its end, this indicator will start to blink continuously. The unit will not function until MIN-TECH, Silver Activated Post Carbon, SCMT filter and/or RO membrane are/is replaced.
- RO change indicator keeps blinking continuously with the buzzer beeping for 10 times every time the system is switched ON. The unit will not function until MIN-TECH, Silver Activated Post Carbon, SCMT filter and/or RO membrane are/is replaced.

**Note:** Call A. O. Smith authorised distributor to replace the MIN-TECH, Silver Activated Post Carbon, SCMT filter and/or RO membrane.

## SCPA change indicator

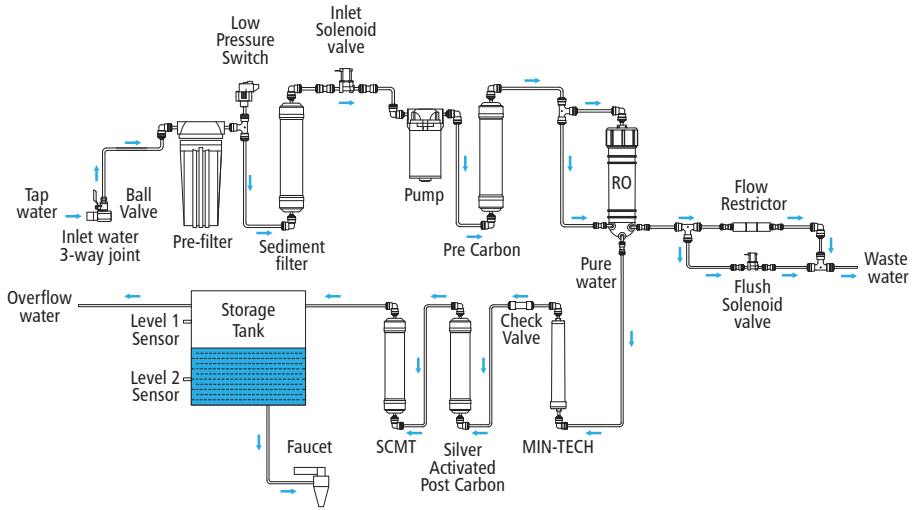
This indicates that the Sediment filter and/or Pre Carbon filter needs to be replaced.

- SCPA change indicator glows when 10% life is remaining, indicating that it is time to replace Sediment filter and/or Pre Carbon filter.
- When Sediment filter and/or Pre Carbon filter life reaches its end, this indicator will start to blink continuously and the unit will not function until Sediment filter and/or Pre Carbon filter are/is replaced.
- SCPA change indicator keeps blinking continuously with the buzzer beeping for 10 times every time the system is switched ON. The unit will not function until Sediment filter and/or Pre Carbon filter are/is replaced.

**Note:** Call A. O. Smith authorised distributor to replace the Sediment filter and/or Pre Carbon filter.

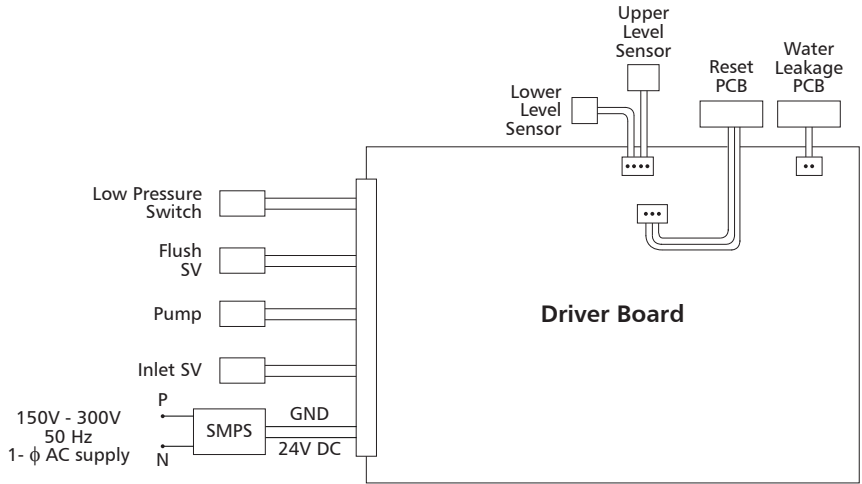
# Water flow

Figure 3



# Electrical diagram

Figure 4



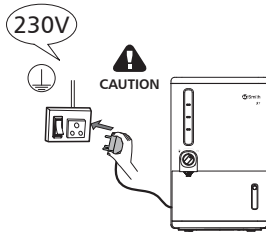
# Safety Precautions

## Electrical safety

Even though the product is designed keeping highest safety standards in mind, there are certain Do's and Dont's which need to be followed while using this product.

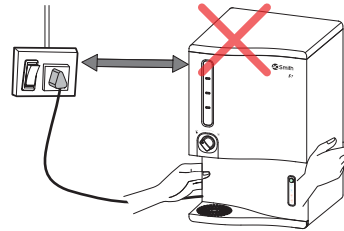
Power plug must be used with a grounded 230V outlet. (Figure 5)

Figure 5



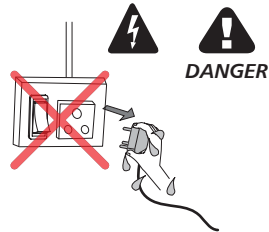
Do not move the product when product is running. (Figure 6)

Figure 6



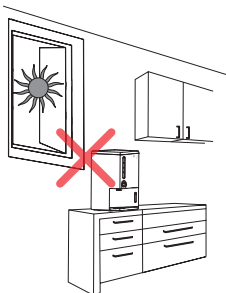
Do not pull out or touch power plug with wet hands to avoid electrical shock. (Figure 7)

Figure 7



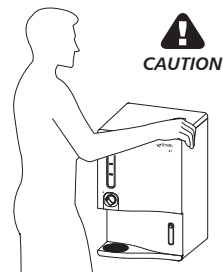
Install the product away from direct sunlight. (Figure 8)

Figure 8



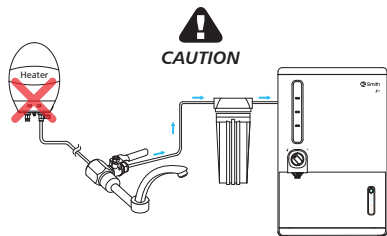
Product should be installed only by A. O. Smith authorised distributor. (Figure 9)

Figure 9



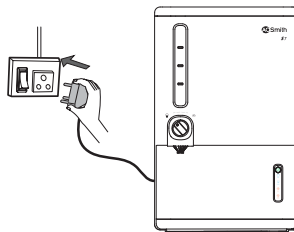
Do not connect hot water to the product. (Figure 10)

Figure 10



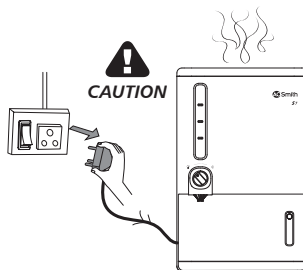
Connect the product to the power supply only with the plug that is provided with the purifier. (Figure 11)

Figure 11



Do not use the purifier if the power cord is damaged or you notice strange noise, burning smell or smoke. Switch off the power, unplug the power cord immediately and call A. O. Smith authorised distributor. (Figure 12)

Figure 12



Do not open the purifier for cleaning the filters or for any part replacements. This must be done only by A. O. Smith authorised distributor. (Figure 13)

Figure 13

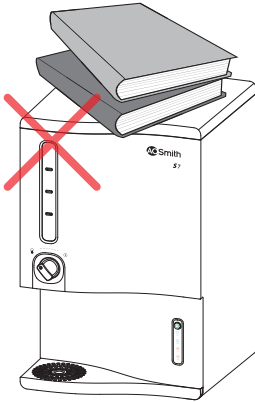




## When it is used

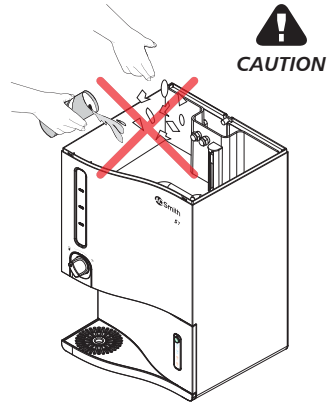
Do not put heavy objects on the product. (Figure 14)

Figure 14



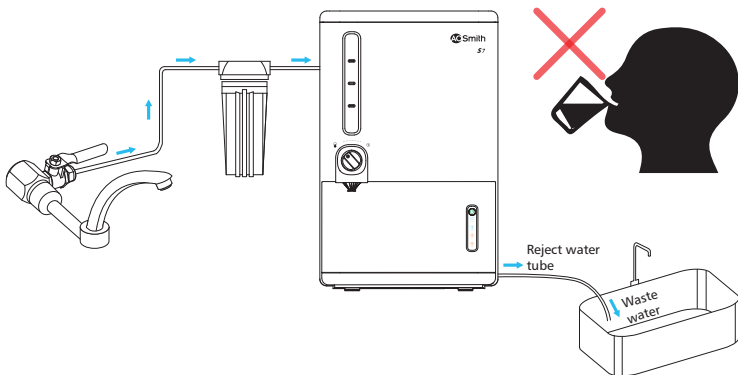
Do not put foreign objects or hand inside the purifier. (Caution is needed, especially for children). (Figure 15)

Figure 15



Do not drink the water from the reject water tube. Reject water should not be consumed in any form. (Figure 16)

Figure 16

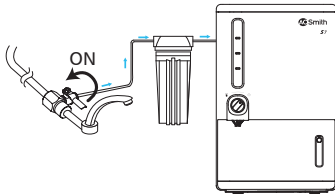


**Note:** It is recommended not to switch off the water purifier and/or turn off the water supply to the product when it is not been used for more than 24 hrs. The purifier has an inbuilt cleaning mechanism which cleans the RO membrane every 24 hrs by flushing it. This feature protects the RO membrane and ensures longer life.

## How to use

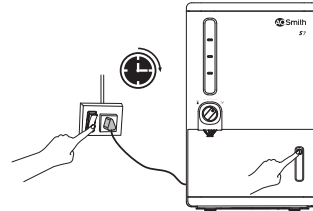
1. Turn ON the water connection through the ball valve. (Figure 17)

Figure 17



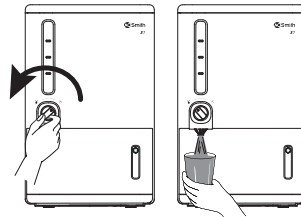
2. Switch ON the power supply and press the power button of the purifier. (Figure 18)

Figure 18



3. To dispense water from the storage tank, turn the faucet knob in anti-clockwise direction. (Figure 19)

Figure 19



**Note:**

- Discard the first cycle of pure water, before you start using it for consumption.
- Make sure to discard the water in the storage tank if you have not used the purifier for more than 2 days.

## Draining Drip Tray

We have provided removable Drip Tray with the product. In case there is spillage of water, it gets collected in Drip Tray.

1. Remove the Drip Tray assembly by pulling it forward. (Figure 20)
2. Remove Drip Tray cover by pulling it upward and then drain completely. (Figure 21)

Figure 20

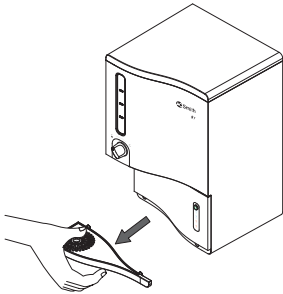
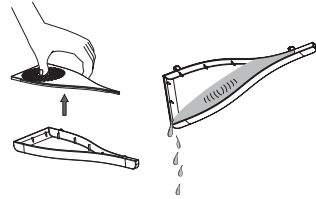


Figure 21



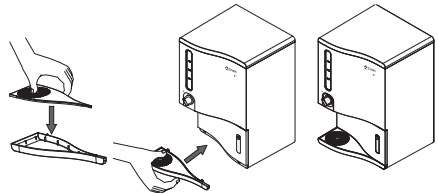
3. Clean the surface of water tray with soft cloth. (Figure 22)

Figure 22



4. Re-attach the Drip Tray assembly into the purifier. (Figure 23)

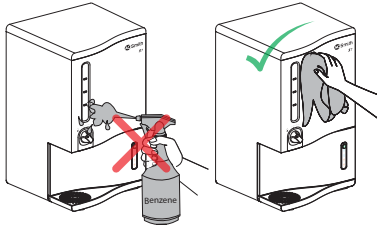
Figure 23



## How to maintain your product

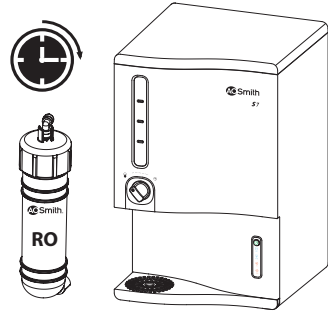
Do not splash water directly or clean with benzene, pesticides, thinner, alcohol, etc., but use a soft, dry cloth to clean the purifier. (Figure 24)

Figure 24



Replace filters regularly according to the replacement indications. This must be done only by A. O. Smith authorised distributor. (Figure 25)

Figure 25



Use A. O. Smith genuine accessories only, for optimal performance of the purifier. (Figure 26)









Figure 26



## Troubleshooting

Your A. O. Smith **S7** water purifier may not function at its desired capability if used incorrectly. This may not necessarily mean that the product is faulty. For instances like these, please follow the steps given below to troubleshoot the problem without the help from a certified technician. If the problem still persists, please call A. O. Smith authorised distributor immediately.

Problems	Check-up	Solution
Change in water taste	Has the purified water been stored in the tank for long time?	Drain the stored water from the storage tank through faucet.
	Filters / Membrane may require replacement.	Call A. O. Smith authorised distributor for replacement.
	Has the raw water quality changed?	Call A. O. Smith authorised distributor.
	Check if there is no water flow through reject line.	Switch OFF the water purifier and call A. O. Smith authorised distributor.
Decreased flow of purified water.	Filters / Membrane may be clogged or damaged.	Call A. O. Smith authorised distributor for replacement.
Less / No reject water.	Check if the reject water tube is bent.	Clear the bent in the reject water tube.
	Check if the reject water tube is blocked.	Switch OFF the water purifier and call A. O. Smith authorised distributor.
No pure water.	Check whether there is water supply in the tap.	If not, take the help of a plumber to set it right.
	Check whether tap / ball valve is closed.	Open the tap / ball valve.
	Check if either RO change or SCPA change is RED.	Call A. O. Smith authorised distributor for replacement of filters.
	None of the above.	Call A. O. Smith authorised distributor.

Buzzer beeps and power LED blinks continuously.		Water leak alarm is triggered indicating that there is a leakage inside the purifier.	Switch OFF the water purifier and call A. O. Smith authorised distributor.
Buzzer beeps and tank full LED blinks continuously.		Overflow alarm is triggered indicating overflow.	Switch OFF the water purifier and call A. O. Smith authorised distributor.
Buzzer beeps for 8 times and power LED blinks continuously.		Low pressure alarm is triggered indicating that the system input water pressure is not in the required range.	Check feed water supply to the purifier. If problem still persists, switch OFF the water purifier and call A. O. Smith authorised distributor.
Buzzer beeps and auto flush LED blinks continuously.		Auto flush alarm is triggered indicating level sensor error.	Switch OFF the water purifier and call A. O. Smith authorised distributor.
RO change LED glows.		RO change indicator glows when 10% life is remaining indicating that it is time to replace filters.	Call A. O. Smith authorised distributor for filters replacement.
Buzzer beeps for 10 times RO change LED blinks continuously.		RO change alarm is triggered indicating that the filters need to be replaced and the water supply has been stopped.	Switch OFF the water purifier and call A. O. Smith authorised distributor for filters replacement.
SCPA change LED glows.		SCPA change indicator glows when 10% life is remaining indicating that it is time to replace filters.	Call A. O. Smith authorised distributor for filters replacement.
Buzzer beeps for 10 times and SCPA change LED blinks continuously.		SCPA change alarm is triggered indicating that the filters need to be replaced and the water supply has been stopped.	Switch OFF the water purifier and call A. O. Smith authorised distributor for filters replacement.

## Technical Specifications

Model	A. O. Smith <b>S7</b> Water Purifier
Product Dimensions (H x D x W) in mm	490 x 329 x 315
Net weight	9.5 kgs (approx.)
Gross weight	13.9 kgs (approx.)
Flow rate*	Up to 15 litres per hour
Storage tank capacity	9 litres (approx.)
Purification technology	RO (Reverse Osmosis) + Silver Charged Membrane Technology
7 Stage Purifying Technology	Pre-filter + Sediment filter + Pre Carbon filter + Side Stream RO membrane+ MIN-TECH + Silver Activated Post Carbon and SCMT filter
Membrane type	Thin film composite RO membrane
Material of construction for plastic parts	Food safe, non-toxic, engineering grade plastics
Pump type	Diaphragm pump, 24VDC, 0.26 Amps, Operating Pressure 125 psi (Max.)
Input voltage range	150 – 300 VAC, 50 Hz
Power rating (Max.)	48 Watts
Pressure Rating***	7 psi to 30 psi
% Recovery**	Up to 30%
TDS reduction**	≥95% (approx.)
Input water temperature	5°C to 45°C

\* Flow rate depends on variable factors such as feed water pressure, feed water characteristics and condition of the membranes and filters.

\*\* Recovery and TDS reduction percentages also depend on variable factors such as life and condition of the membranes and filters, feed water pressure, feed water characteristics.

\*\*\* If input pressure exceeds 30 psi, a pressure reducing valve needs to be installed at the feed line. If the pressure is lower than 7 psi, a booster pump needs to be installed. Ensure you buy them from A. O. Smith authorised distributor.

**Recommended input feed water quality for the optimum performance of your product**

<b>RECOMMENDED FEED WATER QUALITY</b>	
<b>Parameter</b>	<b>Limits</b>
Total Dissolved Solids (TDS)	Up to 2000 ppm
Total hardness	Up to 500 ppm
Turbidity	Up to 5 NTU
Iron	0.3 ppm (max.)
Feed water pressure	7 psi to 30 psi
Feed water temperature	5°C to 45°C

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## FAQs

- 1. What is A. O. Smith S7 water purifier?**

A. O. Smith S7 is advanced 7 stage RO from A. O. Smith. It is 100% RO with no bypass of water for maximum purity. It is double purified by SCMT (Silver Charged Membrane Technology) and required essential minerals are added back to water.
- 2. What is 100% RO with mineraliser?**

In ordinary RO+UV water purifiers, some amount of water is made to bypass the RO membrane. With this, heavy metals, unwanted salts and pesticides also pass through. In A. O. Smith S7 100% of the water is passed through the RO membrane which ensures maximum purity of water and required minerals are added back to pure water.
- 3. How many stages A. O. Smith S7 water purifier has? And what are the stages?**

A. O. Smith S7 has 7 stages of purification which are Pre-filter + Sediment filter + Pre Carbon filter + RO Membrane + MIN-TECH (Mineraliser Technology) + Silver Activated Post Carbon + SCMT (Silver Charged Membrane Technology).
- 4. What is MIN-TECH? Does it retain minerals?**

MIN-TECH is Mineraliser Technology to add essential minerals back to water. Yes, A. O. Smith S7 has an additional mineral filter (MIN-TECH) which adds essential minerals back to water.
- 5. What is the purification flow rate of A. O. Smith S7 water purifier?**

Up to 15 litres per hour, purification capacity also depends on water quality, condition of filters and RO membrane.
- 6. Does it have Pre-filter? Is it free?**

Yes, A. O. Smith S7 water purifier comes with a Pre-filter which is part of the product.
- 7. What all alerts do A. O. Smith S7 water purifier has?**

A. O. Smith S7 water purifier has alerts to change the SCPA (Sediment and Pre Carbon) and RO membrane, Silver Activated Post Carbon along with SCMT (Silver Charged Membrane Technology) and MIN-TECH (Mineraliser).
- 8. What is the nature of indication for the change in filter?**

On the first intimation when the filter life is at 90% the respective filter indicator will start to blink. On 100% filter life consumption, the blinking will be replaced with a constant light in the respective indicator.

**9. In the A. O. Smith S7 water purifier, what is the life of the RO membrane?**

The life of RO membrane in the A. O. Smith S7 water purifier is 800 hrs or 12,000 litres of purified water. It generally would last for 2 years assuming a per day consumption of 15 litres, under the input water norms.

**10. What is the digital display in A. O. Smith S7 water purifier?**

Digital display in A. O. Smith S7 water purifier indicates 1) Tank full  
2) Flushing of RO membrane 3) Change of SCPA (Sediment and Pre Carbon)  
4) Change of RO membrane, Silver Activated Post Carbon along with SCMT (Silver Charged Membrane Technology) and MIN-TECH (Mineraliser).

**11. Can A. O. Smith S7 water purifier be mounted on the wall and can it be table top?**

Yes, A. O. Smith S7 water purifier can be mounted on the wall or can be placed on the counter.

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## Recommended uses of waste water

Although the rejected water has high concentration of TDS (Total Dissolved Solids) and hardness. If required it can be used for the following:

1. It can be used for watering the garden and plants.
2. It can be used for mopping and cleaning the floors.

**Note:** Please consult A. O. Smith authorised distributor before using this water.





**Manufactured by A. O. Smith India Water Products Private Limited**

*(formerly known as A. O. Smith India Water Heating Private Limited)*

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CIN: U31909KA2006PTC040282