

ACSmith
Innovation has a name.

Water Purifier
A1

HOT UV
UV PURIFIED WATER



USER GUIDE

Size: A5 [148.5 mm (W) x 210 mm (H)]

Part No.: 335300-000_R0

Date: 18-04-2017

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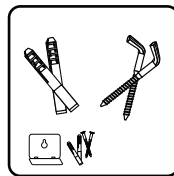
What's in the box?



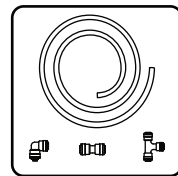
Water Purifier



User Guide



Mounting Accessories



Tube & Connectors

Key Features of your A. O. Smith A7 Water Purifier



PURITY THROUGH UV PURIFICATION

In A. O. Smith A7 Water Purifier water passes through Pre-filter + Sediment filter + Silver Activated Post Carbon + UV Lamp + UFSS (Ultra Fine Stainless Steel) (For Hot water only).



ADVANCED UV LAMP (ULTRA VIOLET LAMP)

UV is a proven Non-chemical, disinfectant technology to give you healthy water. Suitable for water with low TDS.



HOT WATER AT A PRESS OF BUTTON

UV purified hot water at two temperature choices.



UV WITH NIGHT ASSIST

Glow effect guides you to your Water Purifier at night and makes your kitchen look good.



UV LIFE ALERT

Indicate in advance when the UV Lamp need to be changed.



ADVANCED PRE-FILTER & SEDIMENT FILTER

For effective removal of suspended solids and sediment from water.



CONVENIENCE

Purified water storage capacity of 10 litres.
Provision for both wall mounting and table top.



DIGITAL

Digital display for simple and intelligent display of information.

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 **A7** 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 **A1** 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".



DANGER

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



WARNING

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



CAUTION

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 **A1** 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 **A1** 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 **A1** Water Purifier please contact the A. O. Smith Authorized Distributor.
2. Verify that the voltage being supplied corresponds to that which is mentioned in the A. O. Smith **A1** Water Purifier manual.

Introduction

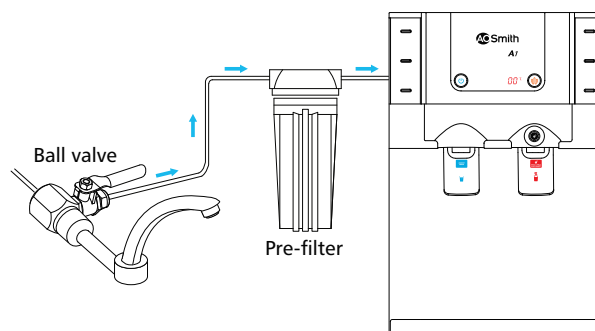
UV is a proven disinfection technology used in water purification which delivers microbiologically safe water. The germicidal lamp inside the UV emits ultraviolet energy that has the capacity to alter the nucleic acid (DNA) of viruses, bacteria and cysts so they cannot reproduce and are thereby considered inactivated. The A. O. Smith **A1** Water Purifier incorporating UV purification technology produces germ-free potable water for drinking. Purified water is collected for drinking in a storage tank.

How does the A. O. Smith **A1** Water Purifier work?

A. O. Smith **A1** Water Purifier has 5 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 Silver Activated Post Carbon.
- **Stage 3 – Silver Activated Post Carbon**
Water is passed through Silver Activated Post Carbon which acts as polisher and enhances the taste of water.
- **Stage 4 – UV Lamp**
In this stage water is passed through UV housing wherein UV rays disinfects the water by eliminating waterborne disease causing microorganisms like bacteria and virus making it healthy for drinking.
- **Stage 5 – UFSS filter (For Hot water only)**
In the final stage water is passed through Ultra fine SS filter wherein this filter removes all the particulate and scale matter developed during heating cycle.

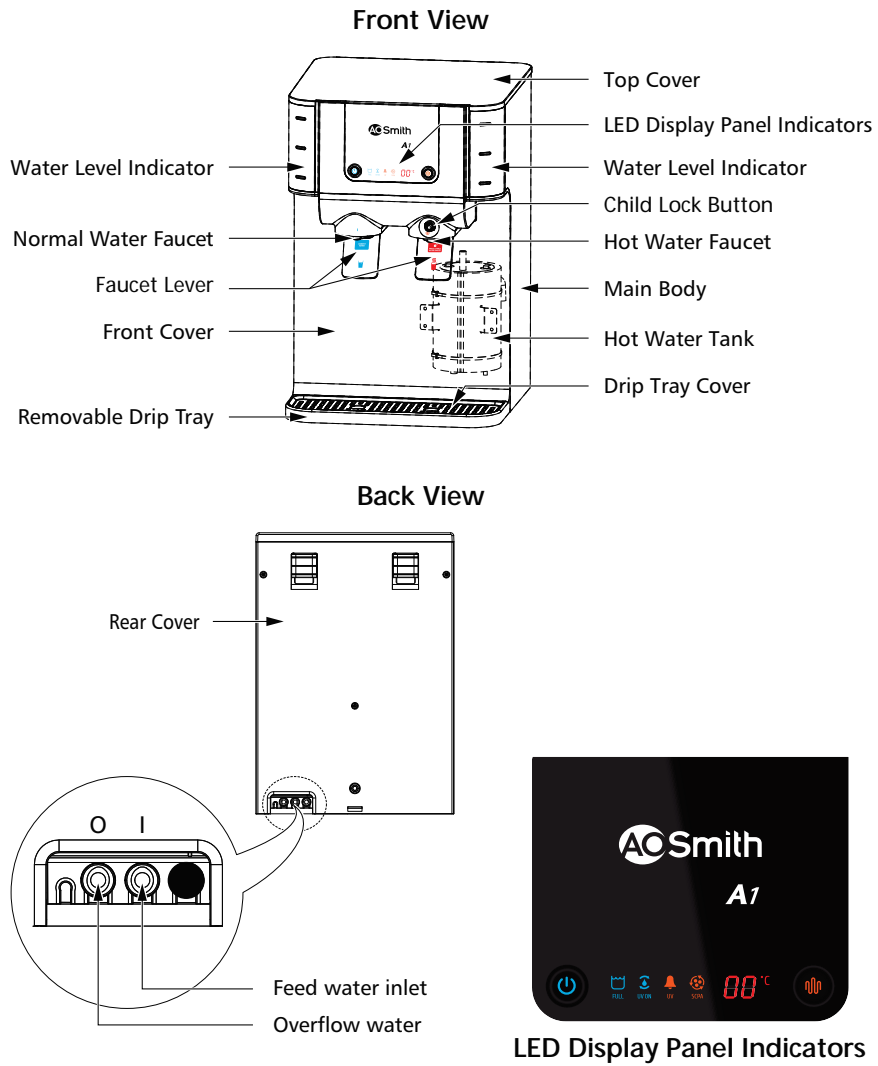
Figure 1



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

Product Overview

Figure 2



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 Authorized 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 Authorized Distributor if you notice continuous blinking of Tank full indicator.

UV ON indicator

This indicates that the UV Lamp is ON and water purification process is in progress.

Note: Call A. O. Smith Authorized Distributor if you notice continuous blinking of UV ON indicator.

UV change indicator

This indicates that the UV lamp needs to be replaced.

- UV change indicator glows when 10% life is remaining, indicating that it is time to replace UV lamp.
- When UV lamp life reaches its end, this indicator will start to blink continuously and the unit will not function until UV lamp is replaced.
- UV 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 UV lamp is replaced.

Note: Call A. O. Smith Authorized Distributor to replace the UV lamp.

SCPA change indicator

This indicates that the Sediment filter and/or Silver Activated Post Carbon needs to be replaced.

- SCPA change indicator glows when 10% life is remaining, indicating that it is time to replace Sediment filter and/or Silver Activated Post Carbon.
- When Sediment filter and/or Silver Activated Post Carbon life reaches its end, this indicator will start to blink continuously and the unit will not function until Sediment filter and/or Silver Activated Post Carbon 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 Silver Activated Post Carbon are/is replaced.

Note: Call A. O. Smith Authorized Distributor to replace the Sediment filter and/or Silver Activated Post Carbon.

Temperature indicator

This indicates the temperature of water inside the hot water tank and displays the Error codes in case of fault in the Water Purifier.

Note: Call A. O. Smith Authorized Distributor if you notice any Error codes (Refer page 20).

Water Heating Button

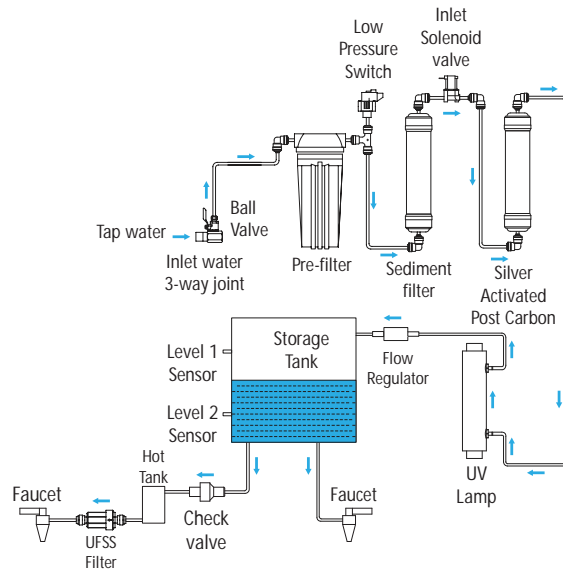
This purifier is capable of dispensing warm water (45°C) and hot water (80°C) as per customer need. This button is used to heat the water inside the hot water tank of the purifier.

Child Lock Button

As a safety feature, to prevent hot water from being dispensed accidentally and possibly harming a child, this button is used to unlock the hot water faucet.

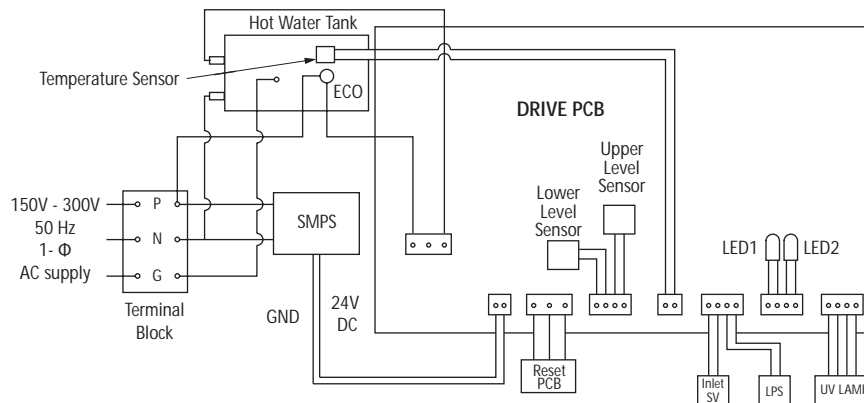
Water flow

Figure 3



Electrical diagram

Figure 4



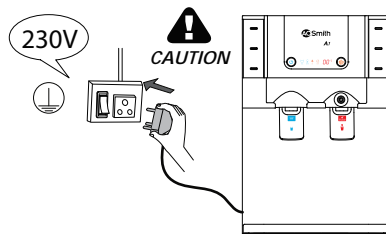
Safety Precautions

Electrical safety

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

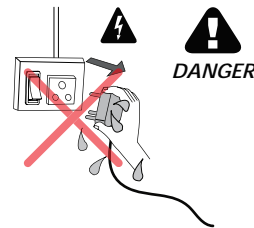
Power plug must be used with a grounded 230V outlet. It is recommended to connect the product to the power supply only with the plug that is provided with the purifier. (Figure 5)

Figure 5



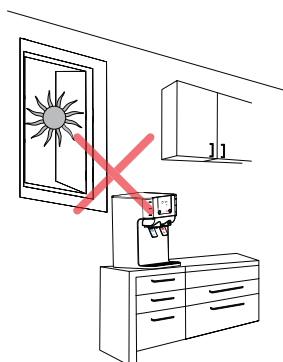
Do not pull out or touch power plug with wet hands to avoid electrical shock. (Figure 6)

Figure 6



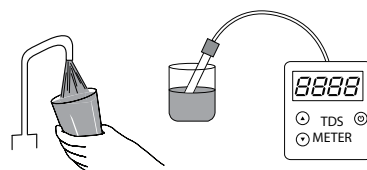
Install the product away from direct sunlight. (Figure 7)

Figure 7



Make sure that the feed water is tested before installation. Do not install the product if the TDS and Hardness are more than that prescribed in the recommended feed water conditions (Refer page 21). (Figure 8)

Figure 8



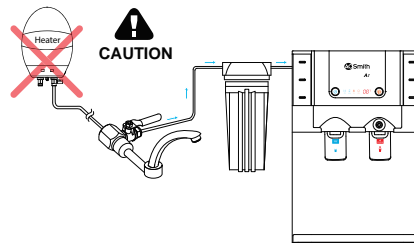
Product should be installed only by A. O. Smith Company Authorised Service Technician. Do not open the purifier for cleaning the filters or for any part replacements. This must be done only by A. O. Smith Company Authorised Service Technician. (Figure 9)

Figure 9



Do not connect hot water supply to the purifier. Make sure that the inlet water temperature to the purifier should be between 5°C to 45°C. (Figure 10)

Figure 10



When it is used

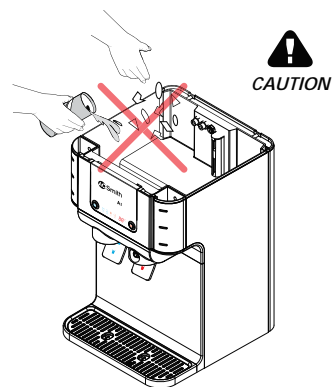
Do not put heavy objects on the product. (Figure 11)

Figure 11



Do not put foreign objects or hand inside the purifier. (Caution is needed, especially for children). (Figure 12)

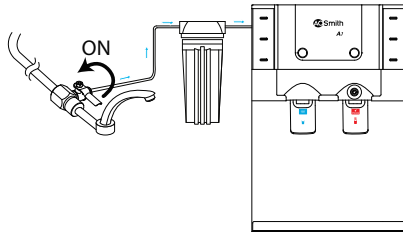
Figure 12



How to use

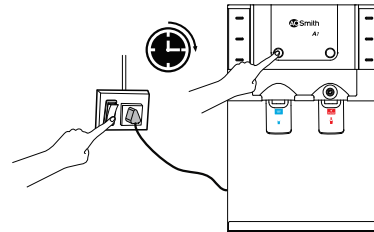
1. Turn ON the water connection through the ball valve. (Figure 13)

Figure 13



2. Switch ON the power supply and press the power button of the purifier. (Figure 14)

Figure 14



To dispense normal water

1. To dispense normal water from the storage tank, push and hold the normal water faucet lever. (Figure 15)
2. To dispense normal water continuously, lift up the normal water faucet lever for the continuous water flow. To stop the water flow, pull down the normal water faucet lever. (Figure 16)

Figure 15

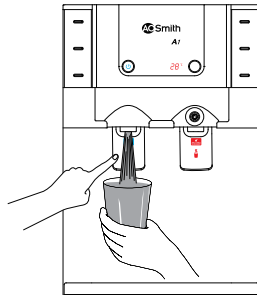
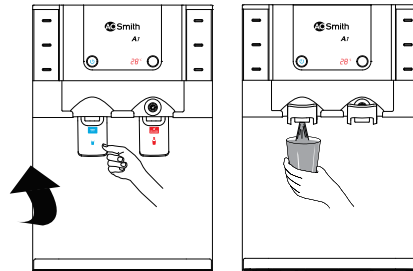


Figure 16



Setting to Warm/Hot water temperature.

This purifier is capable of dispensing at two temperature choices warm water (45°C) and hot water (90°C).

Setting to warm water temperature (45°C)


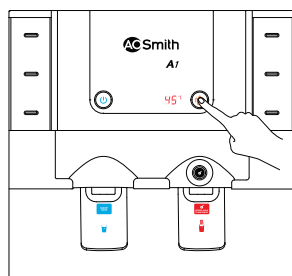
1. Press the water heating button  once. This will set temperature to 45°C which will be displayed on LED.
2. When water heating button glows, it indicates heating has started. The LED display shows the current water temperature.
3. Once the temperature reaches 45°C, the heating stops.

Figure 17



Setting to hot water temperature (90°C)


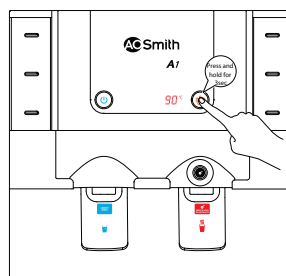
1. Press and hold the water heating button  for 3 seconds. This will set temperature to 90°C which will be displayed on LED.
2. When water heating button glows, it indicates heating has started. The LED display shows the current water temperature.
3. Once the temperature reaches 90°C, the heating stops.

Figure 18



To dispense hot water




1. Press the child lock button  once, to unlock the hot water faucet. While pressing the child lock button , push and hold the hot water faucet lever to dispense the hot water. (Figure 19)
2. To dispense water continuously, lift up the hot water faucet lever first, then press the child lock button  to dispense hot water. To stop the water flow, pull down the hot water faucet lever. (Figure 20)

Figure 19

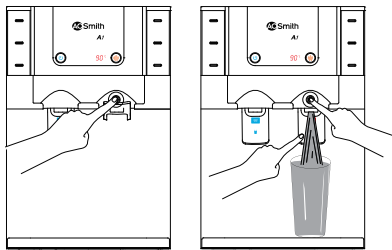
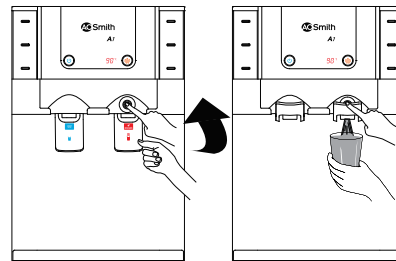


Figure 20



DANGER



Scalding

Hot water is dangerous, especially for children, aged or the disabled. The Water Purifier allows you to control the temperature of your hot water. Water Temperatures over 52°C can cause severe burns due to scalding.

NOTICE

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

How to drain water from storage tank

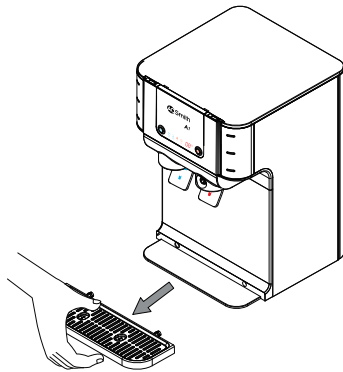
To drain water completely from the purifier, use only the hot water faucet. Drain till you have drained two tank full of water.

Draining Drip Tray

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

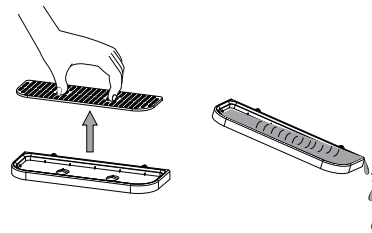
Remove the Drip Tray assembly by pulling forward. (Figure 21)

Figure 21



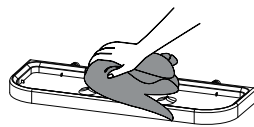
Remove Drip Tray cover by pulling upward and then drain completely. (Figure 22)

Figure 22



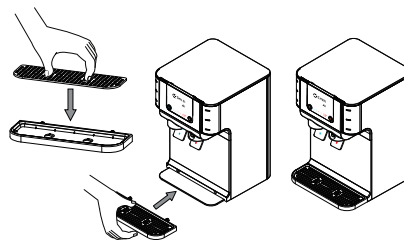
Clean the surface of water tray with a soft cloth. (Figure 23)

Figure 23



Re-attach the Drip Tray assembly into the purifier. (Figure 24)

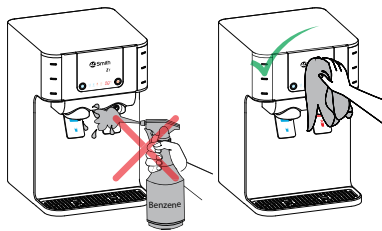
Figure 24



How to maintain your product

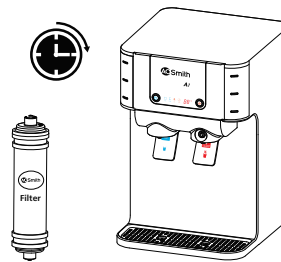
Do not splash water directly or clean with benzene, pesticides, thinner, alcohol, etc. but use a soft, dry cloth to clean the purifier. (Figure 25)

Figure 25



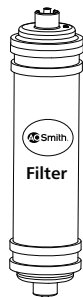
Replace filters regularly according to the replacement indications. This must be done only by A. O. Smith Company Authorised Service Technician. (Figure 26)

Figure 26



Use A. O. Smith genuine accessories only, for optimal performance of the purifier. (Figure 27)

Figure 27











Troubleshooting

Your A. O. Smith **A7** 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 Authorized 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/UV Lamp may require replacement.	Call A. O. Smith Authorized Distributor for filters/UV Lamp replacement.
	Has the raw water quality changed?	Call A. O. Smith Authorized Distributor.
Decreased flow of purified water.	Check whether the tap/ball valve is closed.	Open the tap/ball valve.
	Filters/UV Lamp may be clogged or damaged.	Call A. O. Smith Authorized Distributor for filters/UV Lamp replacement.
Less/No purified 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 UV change or SCPA change is RED.	Call A. O. Smith Authorized Distributor for replacement of UV Lamp or filters.
	None of the above.	Call A. O. Smith Authorized Distributor.
No hot water.	Check whether the storage tank is full.	Wait until the storage tank gets filled.
	Fault in check valve/UFSS filter.	Call A. O. Smith Authorized Distributor.



<p>Buzzer beeps and tank full LED blinks</p> 	<p>Water level sensor error.</p>	<p>Switch OFF the Water Purifier and call A. O. Smith Authorized Distributor.</p>
<p>Buzzer beeps and tank full + power LED blinks continuously.</p> 	<p>Inlet solenoid valve alarm is triggered indicating that the solenoid valve is short.</p>	<p>Switch OFF the Water Purifier and call A. O. Smith Authorized Distributor.</p>
<p>Buzzer beeps and UV ON LED blinks continuously.</p> 	<p>UV Lamp failure alarm is triggered indicating that the UV Lamp is open and the water supply has been stopped.</p>	<p>Switch OFF the Water Purifier and call A. O. Smith Authorized Distributor.</p>
<p>Buzzer beeps for 10 times and power LED blinks continuously.</p> 	<p>Low pressure alarm is triggered indicating that the system input water pressure is not in the required range.</p>	<p>Switch OFF the Water Purifier and call A. O. Smith Authorized Distributor.</p>
<p>UV change LED glows.</p> 	<p>UV change indicator glows when 10% life is remaining indicating that it is time to replace UV lamp.</p>	<p>Call A. O. Smith Authorized Distributor for UV lamp replacement.</p>

<p>Buzzer beeps for 10 times and UV change LED blinks continuously.</p> 	<p>UV change alarm is triggered indicating that the UV lamp needs to be replaced and the water supply has been stopped.</p>	<p>Switch OFF the Water Purifier and call A. O. Smith Authorized Distributor for UV lamp replacement.</p>
<p>SCPA change LED glows.</p> 	<p>SCPA change indicator glows when 10% life is remaining indicating that it is time to replace filters.</p>	<p>Call A. O. Smith Authorized Distributor for filters replacement.</p>
<p>Buzzer beeps for 10 times and SCPA change LED blinks continuously.</p> 	<p>SCPA change alarm is triggered indicating that the filters need to be replaced and the water supply has been stopped.</p>	<p>Switch OFF the Water Purifier and call A. O. Smith Authorized Distributor for filters replacement.</p>

Error Messages and Actions

Error Code/Error Description	Unit Response	Solution
E1 (Element connection fault) 	Buzzer beeps for 10 seconds and hot water supply has been stopped.	Call A. O. Smith Authorized Distributor.
E2 (High Temperature Alarm) 	Buzzer beeps for 10 seconds and hot water supply has been stopped.	Call A. O. Smith Authorized Distributor.
E3 (NTC Sensor Alarm) 	Buzzer beeps for 10 seconds and hot water supply has been stopped.	Call A. O. Smith Authorized Distributor.
E4 (EEPROM error) 	Internal PCB error.	Call A. O. Smith Authorized Distributor.

Technical Specifications

Model	A. O. Smith A7
Product Dimensions (H x D x W)	482 mm x 369 mm x 326 mm
Net weight	7.65 kgs (approx.)
Gross weight	11.70 kgs (approx.)
Storage tank capacity	9.2 litres (approx.)
Storage tank capacity (Hot tank)	0.8 litres (approx.)
Purification technology	UV Technology
5 Stage Purifying Technology	Pre-filter + Sediment filter + Silver Activated Post Carbon + UV Lamp + UFSS filter (For Hot water only)
Material of construction for plastic parts	Food safe, non-toxic, engineering grade plastics
Input voltage	150 – 300 VAC, 50 Hz
Power rating (Max.)	36 Watts
Pressure Rating	5 psi to 30 psi
Heating element wattage	500 Watts @ 230 VAC
UV Lamp Power Rating	11 Watts
Warm water temperature	45°C ± 5°C
Hot water temperature	90°C ± 5°C
Emergency cutout temperature	95°C ± 3°C
Input water temperature	5°C to 45°C

Recommended input Feed water quality for the optimum performance of your product

RECOMMENDED FEED WATER QUALITY	
Parameter	Limits
Total Dissolved Solids (TDS)	Up to 200 ppm
Total hardness	Up to 120 ppm
Turbidity	Up to 5 NTU
Iron	0.3 ppm (max.)
Feed water pressure	5 psi to 30 psi
Feed water temperature	5°C to 45°C

FAQs

- 1. What is Ultraviolet (UV) sterilization?**
Ultraviolet (UV) is a proven purification method uses UV rays to ensure bacteria-free water. The Ultraviolet energy attacks the genetic code of the microorganism and re-arranges their DNA / RNA ensuring inability to function and reproduce.
- 2. How many stages A. O. Smith **A1** Water Purifier has? And what are the stages?**
A. O. Smith **A1** has 4 stages with an additional stage of purification which are Pre-filter + Sediment filter + Silver Activated Post Carbon + UV Lamp + UFSS filter (for Hot water only).
- 3. What is night assist?**
UV Water Purifier with night assist technology along with light at the point of water dispensing. It is designed for the ease of taking a glass of water in the middle of night. It also keeps your kitchen beautifully illuminated.
- 4. What is child lock protection?**
UV Water Purifier with child lock feature inbuilt to meet the international standards of safety for you and your loved ones. It is designed to ensures protection from hot water spillage when you don't intend to take hot water.
- 5. Does it give cold water?**
No, it gives normal water and hot water at 2 temperature choices 45°C and 90°C.
- 6. Can we set the hot water temperature?**
Yes, there are 2 temperature choices which are 45°C at one press and 90°C upon pressing for 3 seconds the water heating button.
- 7. Does it have Pre-filter? Is it free?**
Yes, A. O. Smith **A1** Water Purifier comes with a Pre-filter which is part of the product.
- 8. Sometimes water coming out of the Hot Faucet is not very clear? Why is so?**
A. O. Smith **A1** Water Purifier is recommended to be installed in municipality water with TDS less than 200 ppm and hardness less than 120 ppm. If the feed water has higher hardness, you would see slight turbidity in your hot water. This is not harmful.
- 9. What all alerts do A. O. Smith **A1** Water Purifier has?**
A. O. Smith **A1** Water Purifier has alerts to change the SCPA (Sediment and/or Silver Activated Post Carbon), UV ON and UV change.
- 10. When does the A. O. Smith **A1** Water Purifier indicate a filter/UV Lamp change?**
The first notification is indicated when the consumption of the filter/UV Lamp life is at 90%. When the filter/UV Lamp life consumption is at 100%, the Water Purifier automatically stops functioning.
- 11. What is the nature of indication for the change in filter / UV Lamp?**
On the first intimation when the filter/UV Lamp life is at 90% the respective filter /UV Lamp indicator will start to glow. On 100% filter/UV lamp life consumption, the glowing will be replaced with blinking of the respective indicator.

12. What is the digital display in A. O. Smith **A1 Water Purifier?**

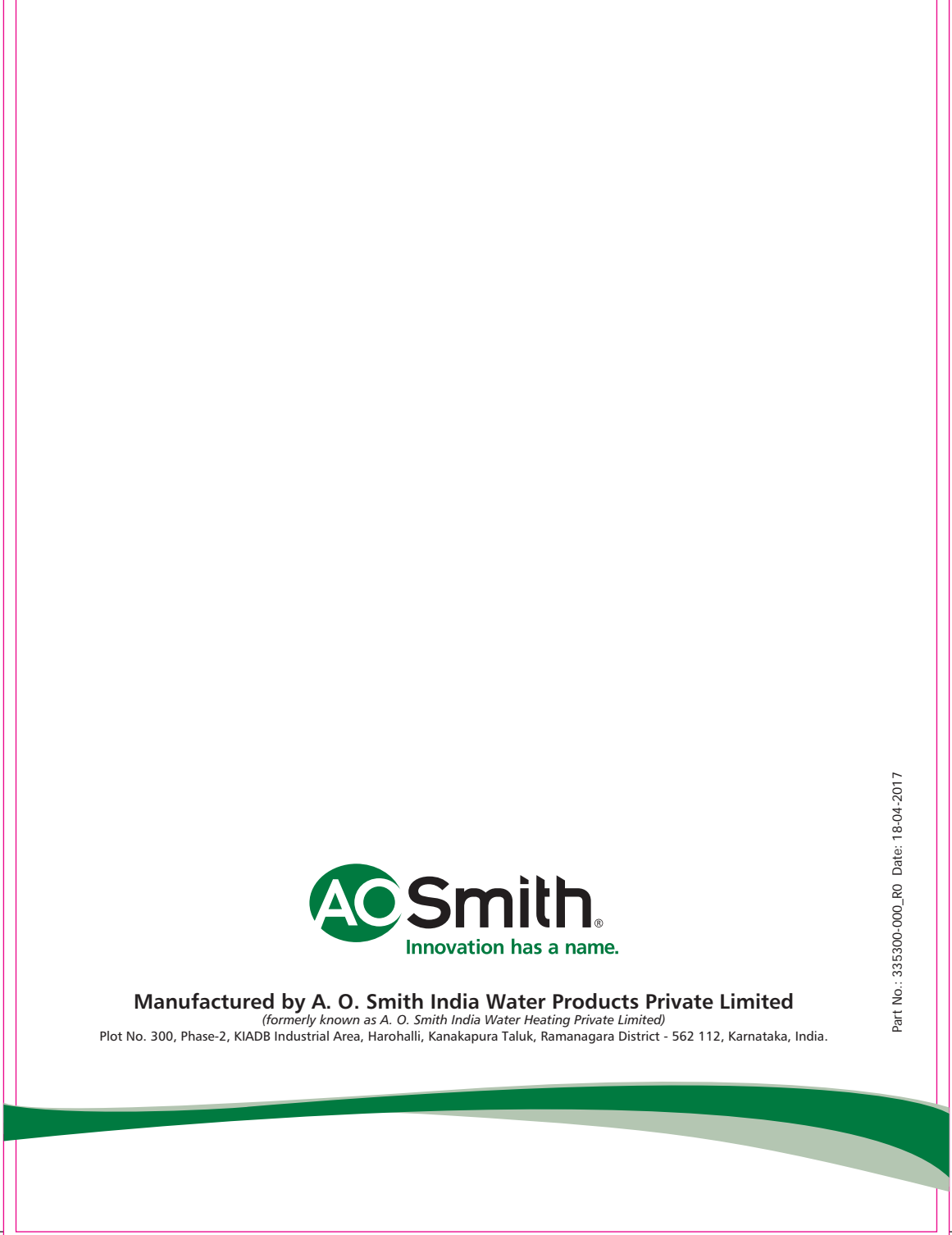
Digital display in A. O. Smith **A1** Water Purifier indicates 1) Tank full 2) UV ON 3) Change of UV lamp 4) Change of SCPA (Sediment and/or Silver Activated Post Carbon).

13. Can A. O. Smith **A1 Water Purifier be mounted on the wall and can it be table top?**

Yes, A. O. Smith **A1** Water Purifier can be mounted on the wall or can be placed on the counter.

14. Does it have colour options?

No, A. O. Smith **A1** Water Purifier comes in one standard colour.



Manufactured by A. O. Smith India Water Products Private Limited
(formerly known as A. O. Smith India Water Heating Private Limited)
Plot No. 300, Phase-2, KIADB Industrial Area, Harohalli, Kanakapura Taluk, Ramanagara District - 562 112, Karnataka, India.

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