

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 factory.

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 packaging if any loss or damage has taken place while in transit, inform the carrier's agent / A. O. Smith representative immediately.

About this manual

This manual is a guide to good practice for operating and periodic maintenance of the A. O. Smith X7* RO Water Purifier.

This does not contain the full servicing procedures necessary for continued successful operation of this product. The services of A. O. Smith Company Authorised Service Technician must be employed periodically on the same.

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.

Disposal of this Product

(Waste Electrical and Electronic Equipment)



This marking on the product, accessories or User Manual indicates that the product and its electronic accessories (e.g. Remote, batteries and other replaceable electronic accessories) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable re-use of material resources.

Household users should contact their local government office, for details of where and how they can take these items for environmentally safe recycling. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

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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 steps such as the installation, operation and maintenance of your A. O. Smith X7* RO 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 user 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 X7* RO 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 Company Authorised Service Technician only.

Before proceeding with the installation instructions:

- Inspect the A. O. Smith X7* RO 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 X7* RO Water Purifier, please contact the dealer where the Water Purifier was purchased or call A. O. Smith Customer Care Centre.
- Verify that the voltage being supplied corresponds to that which is mentioned in the A. O. Smith X7* RO Water Purifier manual.

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Key Features of your A. O. Smith X7* RO Water Purifier

- Baby Safe Water**
8-stage Purification makes the water so pure that it is safe, even for babies.
- Double Protection**
RO+SCMT ensures double protection. SCMT (Silver Charged Membrane Technology) provides second level of purification that prevents any potential secondary level contamination. It's proven that RO+SCMT provides far superior purification compared to RO+UV (or) RO+UF (or) RO+MF.
- Fresh and Natural Taste**
MIN-TECH (*Mineralizer Technology) adds essential minerals like calcium and magnesium into the water thereby ensuring the water tastes fresh and natural. It also balances pH, an essential requirement for healthy drinking water.
- Advance alert for RO membrane and other filters change.
- Digital display for simple and intelligent display of information.
- Purified water storage capacity of 9 litres.

AC Smith
Innovation has a name.

ISO
9001:2015
CERTIFIED

*Product colour and image shown may vary from the actual product.
Part No. : 335300-034_A Date: 19-03-2020

AC Smith
Innovation has a name.

Water Purifier
X7*



POWER OF 1 SERVICE

EXPERT SERVICE

1800-103-2468 / 1860-500-2468
+91 96060 22468 (Whats App) or
aosmithcs@aosmithindia.com

Monday to Friday: 9 a.m. to 8 p.m.
Saturday & Sunday: 9 a.m. to 6 p.m.

For calls registered at A. O. Smith call centre before 4 p.m. only. Available only in selected cities. For more details, please call our Customer Care Centre or log on to www.aosmithindia.com

User Guide

Introduction

A. O. Smith X7* RO Water Purifier uses one of the latest technologies that is used in water purification process. A. O. Smith X7* RO 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 X7* RO Water Purifier removes excessive TDS (Total Dissolved Solids) in water by more than 95%. A. O. Smith X7* RO 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 X7* RO Water Purifier work?

A. O. Smith X7* RO Water Purifier has 8 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 the life of the ART™ MAX.

Stage 3 - ART™ MAX (Advance Recovery Technology™)

The ART™ MAX (Advance Recovery Technology™) is scale control media which conditions the water to reduce scaling potential in water.

Stage 4 - SCB filter*

The SCB filter* uses carbon block which reduces harmful chemicals including pesticides, volatile organic compounds, residual chlorine etc. It also adsorbs bad taste and odour causing organic compounds from water.

Stage 5 - 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 micro-organisms like bacteria, virus, protozoa and cysts.

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Stage 6 - 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.

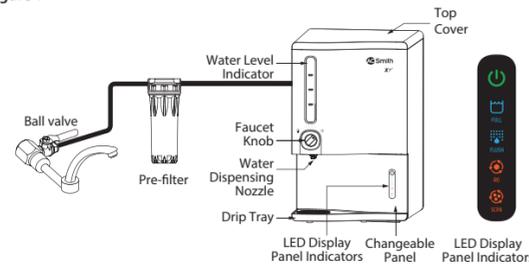
Stage 7 and Stage 8 - ZX Double Protection Dual filter**

This is a dual filter where water is passed through Silver Activated Post Carbon block which acts as polisher and enhances the taste of water. In the final stage water is passed through SCMT (Silver Charged Membrane Technology) filter which ensures double purification of water making it safe and Healthy for drinking.

* Patent Applied

Product Overview

Figure 1



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

Function of indicators

Power button This button is used to switch ON/OFF the Water Purifier.

Tank full indicator FULL This indicates that the Water Purifier tank is full.

Auto flush indicator FLUSH 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.

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RO change indicator

This indicates that the RO membrane needs to be replaced.

- RO change indicator starts blinking (buzzer 10 times) indicating that the RO membrane life is reaching its end time.
- When RO membrane life reaches its end, RO change indicator keeps on blinking and the unit stops functioning.

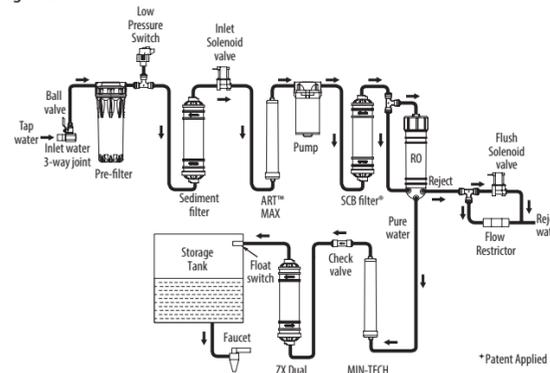
SCPA change indicator

This indicates that the pre and post RO filters need to be replaced.

- SCPA change indicator starts blinking (buzzer 10 times) indicating that the pre and post RO filters life is reaching its end time.
- When pre and post RO filters life reaches its end, SCPA change indicator keeps on blinking and the unit stops functioning.

Water flow

Figure 2

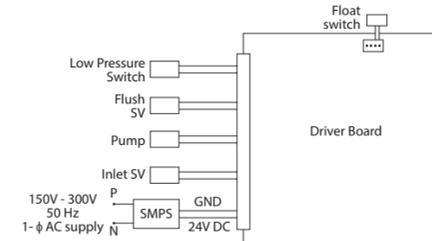


Note: It is recommended not to switch off the Water Purifier and/or turn off the water supply to the product when it is not been used for more than 24 hrs. The purifier has an in-built cleaning mechanism which cleans the RO membrane every 24 hrs. by flushing it. This feature protects the RO membrane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

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Electrical Diagram

Figure 3



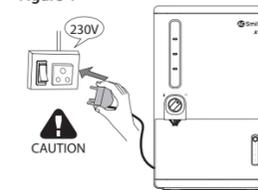
Safety Precautions

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 230 V outlet. It is recommended to connect the product to the power supply only with the plug that is provided with the purifier. Do not pull out or touch power plug with wet hands to avoid electrical shock.

Figure 4



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 5



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Technical Specifications	
Model	A. O. Smith X7® RO
Product Dimensions (H x D x W)	490 mm x 329 mm x 315 mm
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 Charge Membrane Technology
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
Input Voltage	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 pump 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 Company Authorised Service Technician.
 + Patent Applied.

◆ As tested with input water TDS of 750 ppm, Water temperature of 27°C and feed pressure of 20 psi.



Figure 8
 1. Turn ON the water connection through the ball valve.

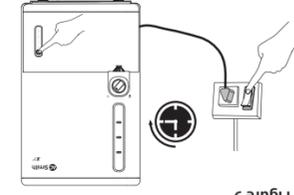


Figure 9
 2. Switch ON the power supply and press the power button of the purifier.

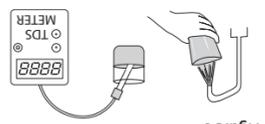


Figure 6
 Make sure that the feed water is tested before installation. Do not install the product if the TDS and Hardness are more than that prescribed in the recommended feed water conditions (Refer Page 12).

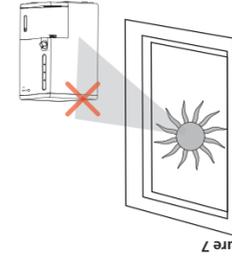


Figure 7
 Install the product away from direct sunlight.

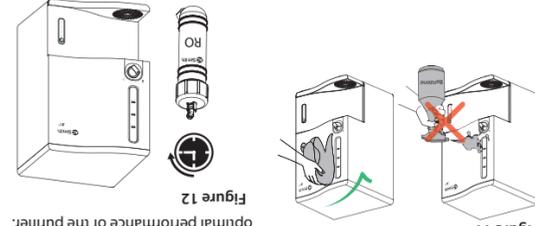


Figure 10
 3. To dispense water from the storage tank, turn the faucet knob in anti-clockwise direction.

Note:
 • 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 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 11
 Replace filters regularly according to the replacement indications. This must be done only by A. O. Smith Company Authorised Service Technician. Use A. O. Smith genuine accessories only, for optimal performance of the purifier.



Figure 12
 Check if the reject water tube is bent.

Problems	Possible Cause(s)	Solution
Change in water taste.	Has the purified water been stored in the tank for long time? RO membrane / filters may require replacement.	Drain the purified water from the storage tank through faucet. Call Customer Care Centre for RO membrane / filters replacement.
Has the raw water quality changed?	Check if there is no water flow through reject line.	Switch OFF the Water Purifier and call Customer Care Centre.
Decreased flow of purified water.	RO membrane / filters may be clogged or ball valve is closed. Check whether the tap/ ball valve is closed.	Call Customer Care Centre for RO membrane / filters replacement. Open the tap/ball valve.
Less / No reject water.	Check if the reject water tube is bent. Check if the reject water tube is blocked.	Clear the bent in the reject water tube. Switch OFF the Water Purifier and Call Customer Care Centre.
Less/No purified water.	Check whether there is water supply in the tap. Check whether tap/ball valve is closed.	If plumber to set it right. Check whether tap/ball valve is closed.
None of the above.	Check if either RO change or SCPA change is blinking	Call Customer Care Centre for replacement of filters. Call Customer Care Centre.

Troubleshooting

Your A. O. Smith X7® RO 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 Customer Care Centre immediately.

Parameter	Limits
Total Dissolved Solids (TDS)	Up to 3000 ppm
Hardness	Up to 750 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

Warranty details/recommended filter change:
 As per the warranty, all the filters, including RO membrane needs to be replaced when the SCPA change and RO change indicator blinks (Refer page 5). This would be 6 months (approx.) assuming daily consumption of 10 Litres per day of purified water. The warranty on filters including RO membrane is 6 months (approx.). The indicator for filter change is for 1 year.
 After 6 months warranty any type of failure, it needs to be changed even though the alarm comes after 1 year.

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

Overflow error.	LED blinks continuously.	Switch OFF the Water Purifier and call Customer Care Centre.
Low pressure alarm is triggered indicating that the system input water pressure is not in the required range.	Buzzer beeps for 8 times and power LED blinks continuously.	Check feed water supply to the purifier, switch OFF the Water Purifier and call Customer Care Centre.
RO membrane life is about to end.	RO change LED blinks and unit is functioning.	Call Customer Care Centre for RO membrane replacement.
RO membrane life ends.	Buzzer beeps 10 times, RO change LED blinks and unit is not functioning.	Switch OFF the Water Purifier and call Customer Care Centre for RO membrane replacement.
Pre and post RO filters life is about to end.	Buzzer beeps 10 times, SCPA change LED blinks and unit is functioning.	Call Customer Care Centre for pre and post RO filters replacement.
Pre and post RO filters life ends.	Buzzer beeps 10 times, SCPA change LED blinks and unit is not functioning.	Switch OFF the Water Purifier and call Customer Care Centre for pre and post RO filters replacement.
Battery error.	Buzzer beeps continuously and all LED (Power, Tank full and Auto flush) blinks.	Switch OFF the Water Purifier and call Customer Care Centre.

Note: Call Customer Care No. 1800-103-2468/1860-500-2468.

14. What is the nature of indication for the change in filter?

On the first intimation when the filter life is at 90% the blinking will be replaced will start to blink. On 100% filter life consumption, the blinking will be replaced with a constant light in the respective indicator.
 15. In the A. O. Smith X7® RO Water Purifier, what is the life of the RO membrane? RO membrane would last for 1 year (approx.) assuming a per day consumption of 10 litres, under the input water norms.
 16. What is the digital display in A. O. Smith X7® RO ? Digital display in A. O. Smith X7® RO indicates 1) Tank full, 2) Flushing of RO membrane, 3) Change of SCPA (Pre and Post RO filters), 4) Change of RO membrane.
 17. Can A. O. Smith X7® RO be mounted on the wall and can it be table top? Yes, A. O. Smith X7® RO can be mounted on the wall or can be placed on the counter.

Recommended uses of waste water

Although the rejected water has high concentration of TDS (Total Dissolved Solids) and hardness, it can be used for the following:
 • It can be used for watering the garden and plants.
 • It can be used for mopping and cleaning the floors.
 Note: Please consult A. O. Smith Customer Care Centre before using this water.

Frequently asked questions (FAQs)

1. What is A. O. Smith X7® RO Water Purifier?

A. O. Smith X7® RO is advanced 8 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. 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 X7® RO 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 X7® RO has? And what are the stages? A. O. Smith X7® RO has 8 stages of purification which are Pre-filter + Sediment filter + ART™ MAX (Advanced Recovery Technology™) + SCB filter™ + Side Stream RO membrane + MIN-TECH + ZX Double Protection Dual Filter™ (Silver Activated Post Carbon block + SCMT).
 * Patent Applied

4. How is A. O. Smith X7® RO different from A. O. Smith X4® RO Water Purifier? A. O. Smith X4® RO is 5 stage RO whereas A. O. Smith X7® RO is 8 stage RO with double purity and added minerals.
 5. What is SCMT? Silver Charged Membrane Technology is double purification of water after the RO membrane to ensure absolute purity.
 6. What is RO+SCMT? It is unique double purification process to ensure absolute purity of water.
 7. Does it retain minerals? A. O. Smith X7® RO has an additional mineral filter (MIN-TECH) which adds essential minerals back to water.
 8. What is MIN-TECH? MIN-TECH is Mineralizer Technology to add essential minerals back to water.
 9. What is the storage capacity of A. O. Smith X7® RO ? The storage capacity in the A. O. Smith X7® RO is 9 litres of pure water.
 10. What is the purification flow rate of A. O. Smith X7® RO ? Up to 15 litres per hour, purification capacity also depends on water quality.

11. Does it have Pre-filter? Is it free? Yes, A. O. Smith X7® RO Water Purifier comes with a Pre-filter which is part of the product.
 12. What all alerts do A. O. Smith X7® RO has? A. O. Smith X7® RO Water Purifier has advance alerts technology to change the filters and RO membrane.
 13. When does the A. O. Smith X7® RO Water Purifier indicate a filter change? The first notification is indicated when the consumption of the filter life is at 90%. When the filter life consumption is at 100%, the Water Purifier automatically stops functioning.

excluded and the warranty and remedies as provided herein-above are in lieu of all other warranties and remedies to the extent permissible under law.

19. NOTWITHSTANDING ANYTHING ELSE TO THE CONTRARY, THIS IS CUSTOMER'S SOLE AND EXCLUSIVE WARRANTY. ALL OTHER WARRANTIES INCLUDING A WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. A. O. SMITH SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER INDIRECT DAMAGES. TOTAL LIABILITY ARISING AT ANYTIME SHALL NOT EXCEED THE PURCHASE PRICE PAID WHETHER BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY.
20. The warranty is issued at Kanakapura, and courts at Kanakapura shall have exclusive jurisdiction over matters covered or flowing from this warranty.

Post Warranty

1. The customer may be offered a yearly Service Contract (PHCP*) at the prevailing Company rates and terms.
2. In case the customer does not wish to enter the Service Contract, customer has the option of calling our Authorised Service Provider and get A. O. Smith Water Purifier unit serviced on actual basis i.e. by paying the Labour Cost and Spares needed to attend to that Service or Service Call at the prevailing Company rates. Such service will be rendered by the Company in towns or places where the Company has its Authorised Service Providers.
3. In case of product repair after warranty by Authorised Service Provider, all expenses of transporting the goods to and from the Authorised Service Provider shall be borne by the customer directly.
4. If, during such service, it is necessary for the Company or Authorised Service Provider to replace or repair defective components or parts, the customer shall be required to pay for the same as per the Company's prevailing price list.

* Visit www.aosmithindia.com for more details on PHCP (Product Health Care Plan).

Jurisdiction

The courts of competent jurisdiction at Kanakapura, Karnataka shall have exclusive jurisdiction over all matters arising out of any disputes in relation to the product.

Warranty Card

Customer Copy to be retained by the Customer

Invoice Number: _____ Dated: _____

Unit Serial Number: _____

Model: _____ Capacity: _____

Customer's Name and Address: _____

Ph: _____ Mobile: _____ E-mail: _____

Dealer's Stamp and Signature



Warranty Card

Company Copy to be sent back to the Company

Invoice Number: _____

Ph: _____ Mobile: _____ E-mail: _____

Dealer's Stamp and Signature



Expert Company Service - Power of 1

1. Different models have different service delivery levels.
2. Service level mentioned for particular models are applicable for metros and 'A' Class cities, e.g. Delhi and NCR, Bengaluru, Hyderabad, Kolkata, Pune, Goa, Cochin, Chennai, Chandigarh and Ahmedabad.
3. Service level deliverables are valid up to city municipal limit only.
4. Service level may differ in case of public holidays and unavoidable conditions due to natural calamities, any political and regional regulations.
5. Power of 1 valid service is applicable for calls registered at A. O. Smith Call Centre before 4 p.m. only.

