

Ion Exchange (India) Ltd. is a leader in the business of water treatment and solutions that are so vital to people's lives and the environment.

For more than five decades, Ion Exchange (India) Ltd., has pioneered many path-breaking innovations in the field of engineering and marketing to provide a one-stop solution for industry, homes and communities. Bearing testimony to this are more than 35,000 water treatment installations worldwide. Our plant have been exported to USA, UK, South East Asia, Japan, Middle East, Far East as well as neighbouring countries like Bangladesh, Nepal, Mauritius and Sri Lanka.

In the consumer market, under the flagship of the Zero B Brand, the company has introduced products catering to every need of the customer. From Online Water Purifiers to the most advanced Reverse Osmosis Water Purifiers, from drinking water vending machines to bottled packaged water, to name a few. Ion Exchange (India) Ltd. has led virtually every breakthrough in the Indian market fulfilling the company's vision : "To be a leader in our business which is so vital to people's lives and the environment".

ZERO B™
PURE WATER SOLUTIONS

USER MANUAL
POWER RO 10 LPH



ION EXCHANGE
Refreshing the Planet

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ZERO B™
PURE WATER SOLUTIONS
Power RO

Congratulations!

You are a proud owner of the boss of all ROs, the True ZeroB Power RO from the house of Ion Exchange (India) Ltd.

You are our esteemed customer and we are extremely delighted to serve you. We promise to deliver you a highly satisfactory experience just like we do it for thousands of our invaluable customers.

With our consistent research and development in the field of water management, we have combated different kinds of water contaminants for over five decades. Being the pioneers of water treatment technology in India, we have been making water pure and safe for different uses.

To assist you better and faster, we have created a 24-hour Customer Care Helpline No. 022-2788. Reach out to us anytime for any suggestions, queries or complaints, and we will be more than happy to help you.

Thanks for purchasing an Ion Exchange (India) Ltd. product.



#Zero Means Purity

ABOUT



Welcome to the New Era Purification Technology by ZeroB. Unlike the traditional RO purification units that perform satisfactorily only on raw water of TDS of up to 1500 ppm, or claim to perform extraordinarily but fail miserably, here's a powerful performer - True ZeroB Power RO Purification System.

It is sturdy, robust and works efficiently for a TDS range of 3000 ppm with a hardness of up to 1000 ppm. This intelligent machine removes bacteria, virus and most chemical and toxic contaminants like pesticides, VOCs, Trihalomethanes, Fluoride, Arsenic and heavy metals.

Water purified by this process has 24x7 protection and remains pure and palatable for days. Thanks to its unique and patented ESS technology that releases small amounts of silver ions to protect the filtered and purified water from recontamination and slime formation in the storage water tank.

Note: On consistent soaking of the RO modules (after a few days of usage) the taste improvement of the water (full salt rejection performance) is attained.

A decorative graphic in the top-left corner consisting of several overlapping green circles of varying sizes, resembling a water splash or bubbles.

CONTENTS

- INTRODUCTION
- SALIENT FEATURES
- PURIFICATION STAGES
- TECHNICAL SPECIFICATIONS
- INSTALLATION
- MAINTENANCE
- INLET WATER CONDITIONS
- DO'S AND DO'NTS

INTRODUCTION

In the current market of Institutional RO purifier units , most RO purification units perform satisfactorily in the raw water TDS up to 1500 ppm. Of course there are RO purifiers that claim input TDS up to 2000 ppm and some even higher.

The fact is that, in the RO units working with the extended TDS range, the life cycle of the RO element is highly compromised, resulting in premature loss of product flow or choking of RO elements.

This drawback is covered up by RO sellers within the AMC of the customer by frequent replacement of RO elements with re-cycled RO elements, sometimes the customer is abandoned by blaming on the bad quality of water. Such a practice makes the product performance unpredictable, creates a nuisance for the customer on service follow up for frequent RO membrane replacements and also bearing the hidden cost of recycled elements in the AMC.

Surely there is a market for RO units with TDS range of 2000 ppm and above. With this in mind, we propose the 'True Zero B Power RO Purification system, which is a robust , sturdy unit ,not only works for a TDS range of 3000 ppm with a hardness up to 1000 ppm, but also removes bacteria, virus and most chemical and toxic contaminants like pesticides, VOC's, Trihalomethanes, Fluoride, Arsenic and heavy metals

This product is equipped with unique patented ESS. It releases small amount of silver ions which protects the purified water from recontamination, prevents slime formation in storage water tank, hence ensuring 24x7 protection.

The purified water can be safely carried in water bottle without fear of recontamination.

FEATURES

- **Unique RO** delivers pure drinking water at High TDS up to **3000 ppm and 1000 ppm hardness**
- **Unique patented Electrolytic sanitizing system (ESS)**
– This gives double protection to RO purified water ,product water is pure and safe to drink for 24x7
- **Unique Nova cartridge** enables high performance at high TDS and high hardness up to 1000 ppm
- **SMPS** Switched mode power supply ensures consistent performance of the purifier at unstable voltages

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The purified water can be safely carried in water bottle without fear of recontamination

STAGES OF PURIFICATION

PREFILTRATION (Stage 1 ,2,3)

Water first passes through multistage prefiltration with high integrity filter bag, dedicated 5 micron filter and silver impregnated carbon Stage 1 FILTRATION Inlet water passes through integrity filter bag which removes particles like sand, silt, hair and other finer particles from water.

Stage 2 - HIGH EFFICIENCY FILTRATION

Water undergoes a finer filtration through a dedicated 5 micron filter, which holds higher quantity of fine particles and suspended impurities.

Stage 3 - BAC FILTRATION

This Bacteriostatic Activated Carbon filter (high grade silver impregnated carbon) removes organic impurities, carcinogenic chemicals (such as VOC and THMs), chlorine, color and odor from water. *This makes the water crisper to taste.*

Stage 4 - SEDIMENT FILTER

This removes still finer particles and *renders clarity to water.*

Stage 5 - NOVA CARTRIDGE

This unique Nova cartridge continuously releases ingredients that keep the surface of the membrane clean at high hardness and high TDS levels. *This enables high performance from the RO element*

Stage 6 - HIGH TDS REVERSE OSMOSIS MEMBRANE

Unlike conventional ROs , this High TDS RO membrane gives high salt rejection , hence maintains the taste even at High TDS of 3000 ppm. RO membrane also rejects excess salts, bacteria and virus and most chemical and toxic contaminants like pesticides, VOC's Trihalomethanes, fluoride , arsenic and heavy metals. *This imparts sweet taste to water and makes the water pure, safe and crystal clear. the water crisper to taste*

Stage 7 ESS

Unique patented Electrolytic sanitizing system (ESS) technology not only gives double protection to RO purified water from accidental contamination but also prevents recontamination of stored water due to external condition for 24 x 7 . The purified water can be safely safely carried in water bottle

Stage 8 Post Carbon cartridge

This carbon cartridge at last stage removes traces of odor, color, and trace contaminants, gives crispiness to water



PARAMETERS

PURIFICATION
PURIFICATION CAPACITY
DIMENSION (LXHXW)

SPECIFICATIONS

Reverse osmosis purification for High TDS RO
Up to 10 LPH for
330 x 320 x 400

PURIFICATION STAGES

PREFILTER
SEDIMENT FILTER
NOVA CARTRIDGE
RO MEMBRANE
AUTO SANITIZER
POST CARBON CATRIDGE

Filter bag + High Q filtration + carbon
5 to 10 micron
Nova cartridge.
1812 High TDS RO membrane
ESS - Electrolytic system sanitizer
Removes traces of odor, color & contaminants

ELECTRIC SUPPLY

OPERATING VOLTAGE
POWER CONSUMPTION(W)

230±10% VAC
36 Watts

INLET WATER CONDITIONS

INLET OPENING
INLET PRESSURE
FEED WATER TDS (PPM)
TURBIDITY (NTU)
TOTAL HARDNESS(PPM)
FREE CHLORINE(PPM)
SILICA(PPM)
IRON AND MANGANESE(PPM)
OIL AND GREECE(PPM)

1/2" BSP thread connection
0.5-2 kg/cm2
3000 max
Less than 5
1000 max
Nil
Less than 20
Nil
Nil

INSTALLATION OF ZERO B POWER RO

Location of the unit:

1. Install the unit in dry place, do not install the unit in hot area Ensure a drainage point for reject water.
2. Install it atleast one foot away from the wall to access enough working space.
3. All units are provided with extra length of tubing. Please do not cut the extra tubing.
4. Please do not terminate the reject line directly in to the drainage , fasten it well above the drainage
5. Provide shade in case of outdoor installations
6. Sufficient ventilation is required

Installation requirements:

1. Electrical requirements: 230V ± 10%, 5 Amp. Socket with proper earthing to be made available at the point of installation.
2. Plumbing requirements:
1/2" water line with minimum of 0.5 kg/cm² pressure. Drainage line is required within a distance of 1 meter from the unit. The reject (drain) line should be kept well above the drain line .

How to install the unit?

1. After opening the unit from the packing, check for damages, loose hydraulic connections and nut/bolt fittings.
2. Provide an inlet valve with 1/2" BSP, female outlet (customer's scope).
3. Connect the 1/2" stem adapter given with the unit into the 1/2" BSP female opening of the inlet valve.
4. Terminate the drain line of the unit to the drainage. Ensure the drain line of the unit is 3 – 4 inches above the drainage and is not inserted in the drainage.
5. Connect the permeate line as per the application.
6. Check the functioning of the unit before actual usage of the unit.
7. Before inserting the 3 – pin plug of the system into the main socket ensure correct voltage and proper earthing of the mains line.

START UP

After the unit is started , check permeate flow and reject flow

Permeate flow should be 170 ml/min – 250 ml/min

Reject flow should be 500 - 650 ml/min

Little deviation in the flow rates is acceptable
(different flow rates at different TDS and inlet water conditions)

INLET WATER CONDITIONS

Parameters	Unit	Limiting values
Feed water TDS	Ppm	3000 max
Suspended solids	Ppm	Less than 5
Turbidity	NTU	Less than 5
Total hardness	Ppm	1000 max
Free chlorine	Ppm	Nil
Silica	Ppm	Less than 20
Iron and manganese	Ppm	Nil
Oil and Greece	Ppm	Nil

REPLACEMENT SCHEDULE POWER RO 10 LPH

CARTRIDGES	LIFE
SEDIMENT	6 months
ACF	6 months
NOVA CARTRIDGE	6 months
RO MEMBRANES	6 months

DO'S AND DON'TS

✓ DO'S

- Ensure that your Power RO unit has been installed at a cool, dry and well ventilated place
- Provide proper earthing to the unit.
- Keep the reject (drain) line well above the drain line.
- Replace SF, ACF, Nova cartridge and RO elements as per the schedule for efficient working of unit
- Call service on getting cartridge life alert
Always use genuine spares for guaranteed performance

✗ DON'TS

- Expose the unit to direct sunlight.
- Pass hot water through the unit as it may damage the filters.
- Place any heavy or dangerous objects on top of the purifier as this may damage the body of your Power RO
- Terminate the reject line directly in to the drainage, fasten it well above the drainage

Do not buy local spares; this will put risk on your water quality and the purifier performance.



SERVICE COUPONS

1st FREE SERVICE COUPON

Model No.: Unit Serial No. :.....
 Customer Name :..... Delivery date :.....
 Customer Mobile No.: Service date :.....
 Customer's Signature: Service by/ Location :.....

2nd FREE SERVICE COUPON

Model No.: Unit Serial No. :.....
 Customer Name :..... Delivery date :.....
 Customer Mobile No.: Service date :.....
 Customer's Signature: Service by/ Location :.....

3rd FREE SERVICE COUPON

Model No.: Unit Serial No. :.....
 Customer Name :..... Delivery date :.....
 Customer Mobile No.: Service date :.....
 Customer's Signature: Service by/ Location :.....

- After the machine is serviced, sign the coupon and give it to 'Water Care Service Engineer'.
- Valid only for a period of one year from the date of purchase.
- Non-transferable and non-extendable.
- Cannot be encashed.
- Ensure that the machine is service to your satisfaction before handing the signed coupon to the 'Water Care Service Engineer'.

- After the machine is serviced, sign the coupon and give it to 'Water Care Service Engineer'.
- Valid only for a period of one year from the date of purchase.
- Non-transferable and non-extendable.
- Cannot be encashed.
- Ensure that the machine is service to your satisfaction before handing the signed coupon to the 'Water Care Service Engineer'.

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- Cannot be encashed.
- Ensure that the machine is service to your satisfaction before handing the signed coupon to the 'Water Care Service Engineer'.



WARRANTY INFORMATION CARD

Please preserve this warranty information card and ensure that this is duly stamped and signed by the Company Official / Authorized Dealer / Authorized Retailer of Ion Exchange (India) Limited. ZeroB Product is warranted throughout India only by Ion Exchange (India) Limited (herein referred to as the company) as per the conditions printed herein.

TERMS & CONDITIONS OF WARRANTY:

We hereby warrant that the unit / equipment shall be free from defective material and faulty workmanship, subject to the following clauses:

Our liability in respect of any defect or failure of any equipment supplied by us or any loss, injury or damage attributable thereto is limited to making good by way of replacement or rectification, defects which show up under proper use, provided the equipment is operated and maintained strictly in accordance with our instructions and arise entirely from proven faulty design, material or workmanship, within a period of 12 months from the date of commissioning of equipment. At the end of this period all our liabilities will cease under this warranty.

We shall have the right to make any replacement of spares or repairs that is required at site. In case of replacement, buyer shall return the replaced part / component to us immediate / on repair completion.

The warranty period on the replaced / repaired part will be limited to the remaining, unexpired portion of the total warranty period. Electrical components are covered under this warranty.

When equipment is ready to be dispatched but cannot be dispatched due to reasons attributable to the buyers, the warranty period will be 18 months from the date of readiness for dispatch as notified by us in writing.

No other party or agency may carry out replacements or repairs unless authorized by us in writing.

If a part / component are to be replaced or repaired under this warranty, there will be no charge for the replacement. However, the travel and conveyance as well as boarding & lodging expenses incurred by our representative reputed for his work will be charged to the buyer at actual.

This warranty does not cover replacement / repairs required as a result of normal wear & tear, accidents or damages / defects caused by misuse / maloperation of the equipment by the buyer.

Ion Exchange (India) Limited shall be excused from any delay or failure in performance required hereunder if caused by reason of any occurrence or contingency beyond its reasonable control, including, but not limited to, acts of God, acts of war, fire, laws, proclamations, edicts, ordinances or regulations, riots, earthquakes, floods, explosions or other acts of nature. The obligations and rights of the party so excused shall be extended on a day-to- day basis for the time period equal to the period of such excusable interruption.

Consumable such as filters / cartridge would be on chargeable basis.

Warranty is applicable in standard rated water conditions only.

This warranty is void if:-

- (a) The unit / equipment is put to wrong use / application
- (b) The unit / equipment installed / commissioned by any person / agency not authorized by us.
- (c) The unit is not installed / operated / maintained as per instructions given in our operation manual and / or those given by our authorized representative.
- (d) The operating conditions and influent water quality are other than those for which the unit / equipment was supplied.
- (e) The agreed / contract price and installation charges, if any, has to be paid to us / our dealer / our retailer.

WARRANTY CARD

(To be filled in by the sales representative and retained by the customer for reference)

Unit Serial No.: Model: POWER RO LPH

Invoice No.: Product Serial No.:

Dated: Date of Expiry of Warranty:

Customer's Name and Address:.....

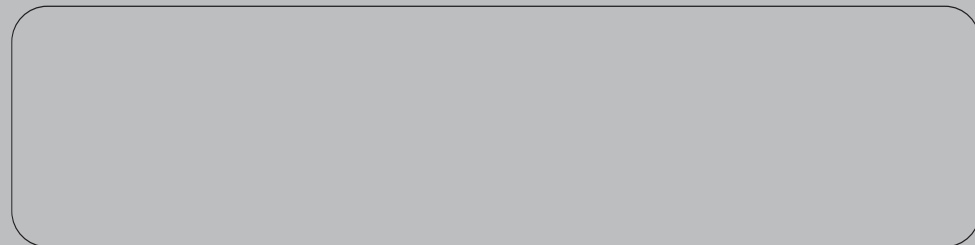
.....

Tel. No. (Res.): (Off.):

Fax No.: E-mail ID:

Customer's Signature:

(I accept the terms and conditions warranty)



Company's Stamp & Signature