

ION EXCHANGE
Refreshing the Planet

ZERO.B™
PURE WATER SOLUTIONS

USER MANUAL

**ZERO.B
ecoro**

WORLD'S Only
ECO-FRIENDLY RO WATER PURIFIER.



80%
Less Wastage
of Water

HRA
TECHNOLOGY



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CONGRATULATIONS



Dear Customer,

You are now a proud owner of "Zero B **eco RO**".

World's only **eco**-friendly RO water purifier that reduces wastage of water by 80%.

We thank you for giving us the opportunity to serve you. We are committed to provide you the same level of satisfaction which thousands of our valued customers have enjoyed in the past.

We are the pioneers of water treatment technology in India. For almost five decades, our technological innovations have combated different types of contaminants present in water, to make it pure and healthy for you.

In our endeavor to further establish a closer relationship with you, we have created a 24 hours Help Desk No.: 022 - 6618 1234 for all your queries. The Water Care Personnel, who is a specialist in water treatment, shall visit you to attend your requirements.

Thank you once again for giving us this opportunity to serve you.

"Drink to your Health. Save Water. Healthy Life."

Home Water Solutions,

Ion Exchange (India) Ltd.

Ion House, DR. E. Moses Road, Mahalaxmi, Mumbai-400011.

Tel.: 022-39132222 / 2207 • Fax: 022-24938737 • SMS eco to 53536

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INTRODUCTION

ZERO B from the house of Ion Exchange (India) Ltd, introduces **eco RO**, a **phenomenal breakthrough the world over** in reverse osmosis based home water purification technology that reduces water wastage by 80%. A product that delivers customer expectations on water wastage, membrane cartridge life and sustained water purity.

The incredible **HRR*** technology is a first of its kind, which reduces wastage of water by as high as 80% as compared to other conventional RO water purifiers, this also enhances water recovery and RO membrane life.

RO water purifiers today are the most popular, trusted and reliable water purifiers since they deliver pure, safe and palatable drinking water, free from microbiological contamination, suspended impurities / chemical contamination and excessive salts. The biggest drawback of this technology is the large percentage of wastage of water in the purification process.

Domestic RO water purifiers, based on a single RO membrane make only 20% - 30% pure water and the remaining 70-80% water goes to the drain. For quite some time RO manufacturers around the world have been looking for innovation to reduce this colossal wastage of water.

HOW IS ZERO-B eco RO UNIQUE ?



Zero B **ecoRO** has revolutionary **HRR*** technology that reduces wastage of water by 80% as compared to other conventional RO water purifiers. Equipped with advanced ESS technology and 8-stage purification, this breakthrough in water purification comes after extensive research by Expert Scientists at Ion Exchange (India) Ltd., Asia's largest water treatment company.

The product is equipped with "Automatic Power Flush" ensuring the enhanced membrane life/ ESS technology that cleans the purifier automatically and prevent germ build up.

The unique "Water Saver Cartridge" and the complementing process ensure excellent recovery and prevent the foul factors formed during the RO process.



*Patent pending

SPECIAL FEATURES

80%
Less Wastage
of Water



Gives you upto 70%
Pure Water Recovery



Sanitizes the water storage
tank 24 x 7 to prevents
germ build-up



Cleans Purifier Automatically,
Prevents Germs Bull-up



Automatic Power Flush
Enhances Membrane Life



Purification Ensures
More Pure Water



Makes other UV &
RO Outdated

OTHER FEATURES:

• Wall mount model • Easy clean, detachable, transparent 6 liter storage tank • New ultra low fouling membrane • Inbuilt voltage stabilizer / compact switch power mode • Removes all bacteria / viruses & chemicals (Pesticides; insecticides) / metallic impurities from water • Remove bad smell / odour & provides energised water • Automatic tank level control

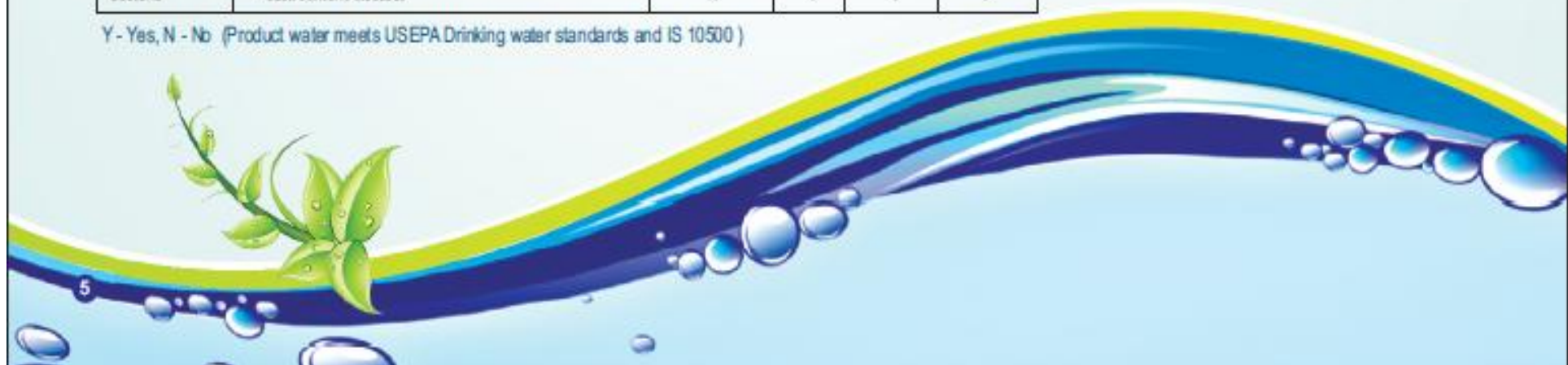
WHAT IMPURITIES DOES IT REMOVE?



Zero B eco RO Vs Conventional treatments

IMPURITIES	POTENTIAL HEALTH HAZARDS	FILTRATION	UV	BOILING	eco RO
Antimony	Higher blood cholesterol, Lower blood glucose	N	N	N	Y
Arsenic	Skin damage, circulatory system problems, higher risk of cancer	N	N	N	Y
Asbestos	Higher risk of developing benign polyps	N	N	N	Y
Barium	High blood pressure	N	N	N	Y
Cadmium	Kidney damage	N	N	N	Y
Chromium	Allergic dermatitis	N	N	N	Y
Copper	Short term exposure: Gastrointestinal distress Long term exposure: Wilson's disease	N	N	N	Y
Cyanide	Nerve damage or thyroid problem	N	N	N	Y
Fluorides	Bone disease, mottled teeth in children	N	N	N	Y
Lead	Children: Physical / Mental development delayed Adults: High blood pressure, kidney problems	N	N	N	Y
Mercury	Kidney damage	N	N	N	Y
Nickel	Kidney damage, respiratory problems, higher cancer risk	N	N	N	Y
Nitrate	Infants (under 8 months): Blue Baby syndrome	N	N	N	Y
Selenium	Hair / Fingernail loss, circulatory problems	N	N	N	Y
Sodium	Hypertension	N	N	N	Y
Sulphates	Catharsis, dehydration, gastrointestinal irritation	N	N	N	Y
Thallium	Hair loss, changes in blood, kidney problems	N	N	N	Y
Trihalomethanes	Liver, kidney or central nervous system problems, higher cancer risk	N	N	N	Y
Giardia Lamblia	Giardiasis	N	Y	Y	Y
Viruses	Gastroenteric diseases	N	Y	Y	Y
Bacteria	Gastroenteric diseases	N	Y	Y	Y

Y - Yes, N - No (Product water meets USEPA Drinking water standards and IS 10500)



THE 8 STAGE PURIFICATION PROCESS



PRE-FILTRATION

ZeroB **ecoRO** comes with a multistage Pre-filter with high integrity filter bag, dedicated 5 micron filter & silver impregnated activated 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 efficiently traps fine particles and suspended impurities. *It renders clarity to incoming water.*

Stage: 3. BAC Filtration - This highly filtered water then passes through a Bacteriostatic Activated Carbon filter (high grade silver impregnated carbon) which removes organic impurities, cancer causing chemicals (such as VOC and THMs), chlorine, colour and odour from water. It also prevents the growth of bacteria on the carbon itself. *This makes the water crisp to taste.*

WATER SAVER CARTRIDGE (WSC)

Stage: 4 & 5. This unique WSC promotes extra high water recovery by generating active ingredients that keep the surface of the membrane clean. The dual processes of Membrane Sanitizing (ESS) and E-CLEAN membrane cleansing system enables high performance.

This results in more purified water and 80% less water wastage as compared to other conventional RO water purifiers.



ULTRA LOW FOULING REVERSE OSMOSIS MEMBRANE

Stage : 6. The new Ultra Low Fouling RO membrane promotes high recovery of good water and rejects excess salts, bacteria virus, 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.*

e-health COMBO FILTER

Stage : 7 & 8. A n a m a z i n g e l e c t r o l y t i c p r o c e s s a n d s i l v e r i m p r e g n a t e d c a r b o n i n t h e c a r t r i d g e n o t o n l y g i v e s d o u b l e p r o t e c t i o n t o t h e R O p u r i f i e d w a t e r f r o m a c c i d e n t a l c o n t a m i n a t i o n b u t a l s o p r e v e n t s r e - c o n t a m i n a t i o n o f t h e s t o r e d w a t e r d u e t o e x t e r n a l c o n d i t i o n s f o r a l m o s t a w e e k . T h e s i l v e r i m p r e g n a t e d c a r b o n r e m o v e s t r a c e s o f o d o u r , c o l o u r a n d t r a c e c o n t a m i n a n t s .

*This guarantees purity not just in stored water but even when you carry it outside.**

*Condition Apply



PRECAUTIONS IN INSTALLING THE UNIT



A. Location of the unit

- Find a suitable position for installing Zero B **ecoRO** on the wall
- Locate the Zero B **ecoRO** so as to have easy access to dispensing
- Zero B **ecoRO** should be located close to an available tap or water outlet (not exceeding 1 meter in length)
- A pre-filter along with inlet, drain has to be located over a drainage point such as sink in the kitchen
- All units are provided with extra length of tubing. Cut the extra tubing which is left after installation
- Wall Mounted Zero B **ecoRO** should be located conveniently where the power outlet of 230VAC is available
- The reject line on the pre-filter is a free falling water line; avoid connecting any tube over this port. Also keep the reject line 3-4 inches above the drain port

B. System

- The unit is a high-pressure water system; hence all water fittings to be ensured tight and fitted with U-dip. Do not tamper with these fittings
- Unit is not to be kept in closed environment. Sufficient ventilation is required
- Avoid any kind of high impact on the unit

Installation requirements:

- Systems Electrical requirements: 230VAC \pm 20%, 5 Amp. Socket with proper earthing to be made available at the point of installation
- Plumbing requirements: $\frac{1}{2}$ " water line with minimum of 0.5 kg/cm² and maximum of 2 kg/cm² pressure
- Drainage line is required within a distance of 1 meter from the unit
- Ensure that the raw water quality meets the specification



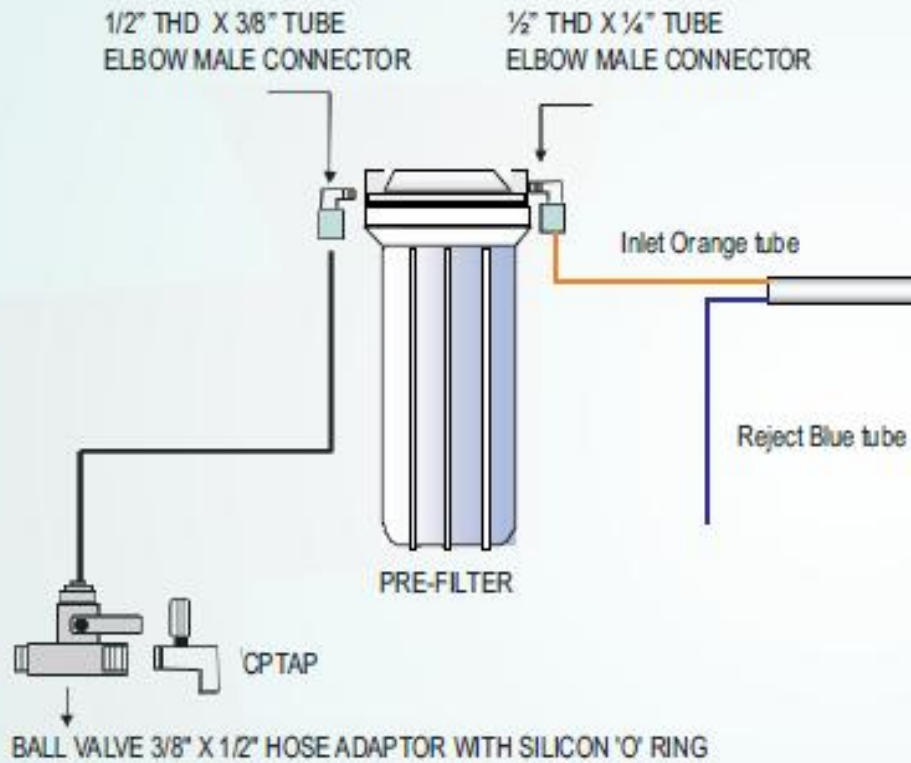
MOUNTING THE UNIT ON THE WALL



- Fix the mounting screws at the desired location using the template
- Ensure that the screws are adequately grouted into the wall. Ensure that 15 mm of the screw is out of the wall surface
- Fix the Zero B **ecoRO** on these screws and start the water and electrical connections
- 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
- The tank may take approximately 30 to 45 mins to fill 6 litres of purified water



INSTALLATION



PRE-FILTER CAN BE LOCATED
AT ANY CONVENIENT
LOCATION W.R.T ZERO B
ecoRO UNIT

INSTALLATION & MAINTENANCE



Your Zero B **ecoRO** will be installed free of cost by our 'WaterCare' Service Engineer.

(Only basic installation material has been provided with the product. Additional material required will be charged at actual)

OPERATION

After installing the unit, allow the tank to fill completely with clean water in order to flush the RO Membrane. Drain the tank and allow it to fill up again. The unit is now ready to use.

MAINTENANCE

Replace cartridges as recommended for ensuring continuous efficient working of Zero B **ecoRO**.

Pre-filter - After every 6 months.

Water saver cartridge - Every one year or on choking.

RO Membrane - Every year or on choking.

E- Health combo filter - Every one year.

The outer body of Zero B **ecoRO** should be wiped with a clean soft cloth and a mild household cleaner.



INLET WATER CONDITIONS

Parameters	Unit	Limiting Values
Feed Water TDS	ppm	Upto 1500
Suspended Solids	ppm	Upto 1500
Turbidity	NTU	Less than 5
Total Hardness	ppm	Upto 500
Free Chlorine	ppm	Less than 0.5
Silica	ppm	Less than 20
Heavy Metals	ppm	Less than 0.5
Iron and Manganese	ppm	Nil
Oil and Grease	ppm	Nil
Temperature	Degree C	Upto 40 degrees

*The above specifications may change without prior notice.

TECHNICAL SPECIFICATIONS

PARAMETERS	ZERO B <i>eco</i> RO
Dimensions (basic unit)	275mm (L) x 230mm (W) x 370mm (H)
Weight	12 kg
Output Flow Rate	10 liter/hour*
INLET WATER CONDITIONS	
Inlet Opening	Inlet opening from your 1/2" BSP male thread connection
Inlet Pressure	0.5-2.0 kg/cm ²
Maximum Inlet Water TDS	1500 ppm (Subject to hardness of inlet water being less than 500 ppm)
Water Saving	80% of input water
Rejection of Salts (TDS)	Up to 95%
Recovery	60-70%*
ELECTRIC SUPPLY	
Operating Voltage	230 ± 10% VAC
Power Consumption	30 Watts Max.
RO Booster Pump	36 VDC
PURIFICATION STAGES	
Pre-filter	Integrated filter bag Dedicated 5 micron filter Bacteriostatic silver impregnated activated carbon
Water Saver Cartridge (Suggestive)	E-SAN Block Filter
RO Membrane	ULF 80 GPD
E-Health Combo Filter (Suggestive)	Electrolytic Water Protector Silver Impregnated Carbon
INDICATIONS	
Power On	GREEN LED
RO On	BLUE LED
Tank Full	WHITE LED

Product water meets USEPA & IS 10500 drinking water standards

- Note:
1. It is normal to have a very small reject flow from reject line (Product feature)
 2. It is normal to see frequent burst of deaining (4-5 times an hour. This flushing water also is accounted in the water saving calculations)
 3. * Under test conditions of 750 ppm TDS

COMPONENTS



HOW TO USE

- Start the water line and switch on the power, green indicator for power will be ON.
- Unit will be flushed for few seconds, there will not be pure water when it is flushing. Frequent flushing keeps the RO membrane surface clean.
- You will observe, now that the pure water is getting filled in the tank, while the tank is filling, the blue indicator for process will be ON.
- While tank is filling during process of water purification, you will observe minimal waste water flow, which is much lower than the conventional Reverse Osmosis water purifiers .
- The tank gets automatically filled with the purified water in approx one hour. When the tank is full, 'Tank full' white indicator will turn ON and 'Purifier On' blue indicator will turn OFF.
- White indicator will be ON when the tank is filled completely.
- Take a tumbler and dispense some water from the faucet, 'Tank Full' indicator will turn OFF and 'Purifier On' blue indicator will turn ON.

NOTE: Dispense all the water in the tank completely for the first time before using the purifier.

It is normal to see a very small trickling flow from the reject line. This is a deviation from the high reject flow from a conventional RO.



Unlike other RO water purifiers, the storage tank remains clean for days and need not be cleaned frequently, the in-built sanitizing system keeps the water pure for almost a week.

When to clean the tank?

The tank should be cleaned:

- During installation.
- Once in a month, when in use.

How to clean the tank?

- Switch off the power.
- Dispense all the water from the tank.
- Unlock the tank by sliding the tank-lock up.
- Pull out the tank gently from the unit, clean the tank and the lid using fresh water and mild liquid soap if required. Ensure that the tank does not have any offensive smell (even that of soap) before re-installing.
- It is highly recommended that the tank should be cleaned as per the above process.

Pre-filter Cleaning

When to clean?

The pre-filter is to be cleaned:

- Whenever tank takes more than 90 min. (1½ hr.).
- As a routine once in a month.
- For muddy water, clean regularly.

How to clean?

- Close the inlet tap, switch off the power.
- Open the pre-filter housing.
- Turn and remove the cartridge.
- Remove the filter bag, hold it under running tap water and keep squeezing the filter bag till water coming out is free from dirt.
- Assemble the unit following the reverse sequence of opening. Tighten the housing securely to avoid leakage of water.

DO'S AND DONT'S



DO'S

- Ensure that your Zero B **eco RO** unit has been installed at a cool, dry and well ventilated place and in *vertical position*
- Clean the tank once in 30 days.
- If you have not used the unit for more than 7 days, clean the tank before reusing the unit, as water might have contaminated due to long storage.
- Keep the tank lid on Zero B **eco RO** securely to avoid exposure of water to airborne dirt and dust.
- In case of cartridge replacement, always call Zero B Help Desk: 022 - 6618 1234.
- Keep the reject line 3-4 inches above the drain point.
- Always use genuine Zero B spares to protect your purifier.

DONT'S

- Expose the unit to direct sunlight
- Pass hot water through the unit as it may damage the filters. Your Zero B **eco RO** is for cold water usage only (max temp. 40° C).
- Place any heavy or dangerous objects on top of the purifier as this may damage the body of your Zero B **eco RO**.
- Pull out the tank without switching off the unit and draining the water from the tank.
- Do not buy local spares, this will put a risk on your water quality and the purifier performance.



TROUBLESHOOTING



Before calling for service, check the following:

- Power supply on
- Inlet water with sufficient pressure
- Product water tank properly placed on the unit
- Check and clean the pre-filter

SYMPTOMS	CAUSES	SOLUTION
1. Water tastes & smells bad	a. Filters might have exhausted	a. Clean the tank, b. Call Zero B Help Desk: 022 - 6618 1234
2. Pure water flow stops	a. Prefilter, water saver cartridge, RO membrane choked	a. Call Zero B Help Desk: 022 - 6618 1234
	b. Tank not inserted properly	b. Insert the tank properly
	c. The tap water valve is closed	c. Open the tap
	d. Power supply OFF	d. Switch ON the Power supply

- Note:** 1. It is normal to see the reject water flushing very frequently for few seconds.
2. If the flushing flow/reject water flow stops during usage call Zero B Help Desk: 022 - 6618 1234

SERVICE AT YOUR DOORSTEP



The Company offers you one year warranty for your Zero B ecoRO. After expiry of warranty you can avail the option of entering into Annual Maintenance Contract with us. For details, do remember to ask for your copy of the contract from the Company before the warranty period gets over.

For registering your complaint please contact at Zero B Customer Care



To avail the benefits of free service customer's needs to register their details to Zero B Customer Care no. 022 6618 1234 or e-mail to zerob@ionexchange.co.in within 1 month from the date of purchase of the product.

Invoice no.; date of purchase; customer's name; address; telephone no.; e-mail ID

Please preserve this warranty card and ensure that this is duly stamped and signed by the company official. Zero B **eco RO** (therein referred to as the 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

- To avail the benefits of 3 free services, customer needs to register his/her details (invoice number/date of purchase/customer's name/address/telephone number) at our Zero B Help Desk, or post or e-mail within 1 month from the date of purchase of the product.
- The Company's liability under this warranty shall remain valid if, and only if the product is duly installed by the Company at the address specified in the invoice or where the installation is at a place other than specified in the invoice, such installation is undertaken with the consent of and by the Company.
- The product is warranted against any manufacturing defect arising out of any faulty or defective material or workmanship for a period of 12 months from the date of purchase.
- The Company's responsibility will be either to repair the defective components or exclude defects occurring because of abuse or faulty maintenance. Repairs of goods or parts by others and consumable components such as Cartridge No. 1, 2, 3 are not covered under this warranty.
- The Company will be entitled to retain any defective part replaced under warranty.
- The Company's responsibility under this warranty will confine to the first purchaser only, and will not apply or extend to any subsequent sale of the product by the customer.
- The consumer will have no claim under this warranty in respect of death/injury to any person or loss/damage to any property caused as a result of equipment failure, breakdown or accident on utilisation of goods not in accordance with the instructions in this user manual or any other circumstances beyond the control of the Company. Any dispute arising out of this warranty will be settled in the courts at Mumbai only.
- The customer shall notify the Company in writing promptly, of any defects noticed and shall give the Company adequate time to inspect, test and rectify them for which the customer will deposit the product if so required by the Company, to the Company office/service centre along with the warranty and proof of purchase.
- Zero B reserves the right to make design and product changes, improve design or change specifications at any time without contingent obligation to prospective buyers, or owners of products previous sold.
- Under no circumstances, the terms mentioned above are negotiable by any Zero B employee or its authorised service provider.
- The company will provide the service/ installation within the municipal limits or network locations, outside the service area any service will be on chargeable basis.



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 the communities. Bearing testimony to this are more than 35,000 water treatment installations worldwide. Our plants 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".



Home Water Solutions: Ion Exchange (India) Ltd., Ion House, Dr. E. Moses Road, Mahalaxmi, Mumbai-400011,
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