



HOUSE of PURITY

Instruction Hand Book for Installation, Operation and Maintenance.



HOUSE of PURITY



ISO 9001:2008
Certified



MEMBER

Manufactured by:

KENT RO SYSTEMS LTD.

Unit-2, Khasra No 93, Village-Bantakheri
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Uttarakhand - 247668

Marketed by:

KENT RO SYSTEMS LTD.

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Welcome to KENT



Dear Customer

Welcome to the world of **KENT**, a leading name in the water purification industry of India. With a KENT product you have all the reasons to smile, since at **KENT** we take pride in the quality and laboratory-tested performance of our products.

We are confident that your decision to own **KENT MINI Water Softener** will go a long way in enriching your washing, bathing and cleaning experience. We assure you, that you will be satisfied with its trouble-free performance and quality which comes without any compromise.

This manual is an effort towards familiarizing you with the operation and maintenance of **KENT MINI Water Softener**. Before operating the unit, please read it thoroughly and retain it for future reference. To ensure that the warranty of your water purifier is effective, fill up the enclosed warranty card and send the installation report within 15 days of purchase. Should you need further assistance, do not hesitate to contact your nearest **KENT** dealer or branch.

Best Wishes

KENT RO SYSTEMS LTD.

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Introduction

Presenting the **KENT MINI Softener** to liberate you from the problems of hard water and provide a rich bathing, washing and cleaning experience. It converts hard water into soft water which helps generate extra lather. As a result, you can wash your clothes, lather and clean utensils in a much better way with less soap.

With Kent Mini Water Softener, it's time to say goodbye to harmful effects of hard water.

Items in the Box

- | | | |
|---|---|----------|
| A. KENT MINI Water Softener | : | 01 No. |
| B. ACCESSORIES | | |
| 1. Fitting for Geyser & Dishwasher | : | 01 No. |
| 2. Plastic white pipe (3/8") | : | 05 Mtrs. |
| 3. Salt Pouch for Regeneration | : | 05 Nos. |
| 4. Screw & Plastic inserts Qty: | : | 04 Nos. |
| 5. 3 Way Connector | : | 01 No. |
| 6. SS Ball Valve 3/8 | : | 01 No. |
| C. Instruction Manual | : | 01 No. |
| D. Centre Drill Sticker for wall mounting | : | 01 No. |

Salient Features

- Quality of the water is enhanced by replacing salts of Magnesium & Calcium with Sodium thus making the water soft.
- With robust structure and space saving design it can be conveniently installed on the wall in kitchen or bathrooms.
- High quality Resin for long life and efficient ion-exchange process
- Low Maintenance.
- Regeneration can be easily done by self.

Technical Specifications

MODEL	KENT MINI Water Softener
Dimensions(mm)	H-505 L-380 W-270
Volume	1.2 Ltr. resin
Weight	4.2 kg
Max Flow Rate	120 LPH
Colour	Off White

Softening Process

Hard water containing high concentrations of dissolved Magnesium and Calcium enters the Mini Softener through the 'IN' port, where it flows down through a specially prepared ion-exchange resin that 'softens' it.

The resin consists of specially manufactured beads that have been saturated with sodium ions.

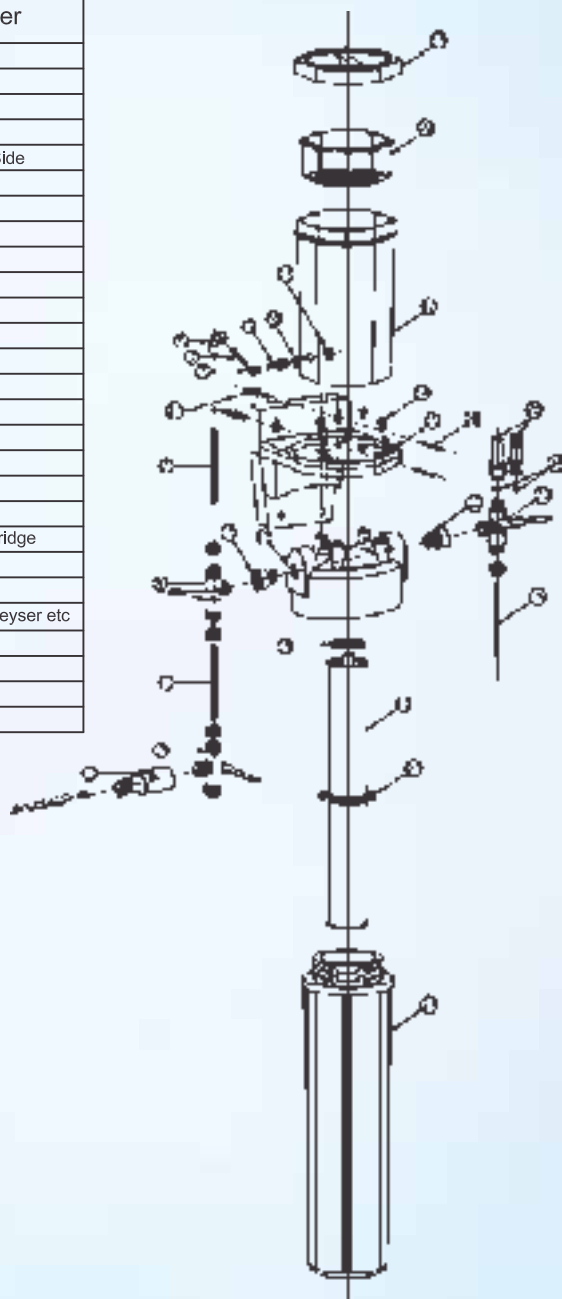
The process of 'softening' occurs as the ions of Calcium and Magnesium are attracted to the charged resin beads. They swap their places with Sodium ions resulting in making the water Soft.

Important Instructions

- Handle the water softener carefully. Do not drop or set it on sharp protrusions.
- Avoid installation under direct sunlight as exposure to direct heat may cause distortion and damage to non-metallic parts.
- This system is not intended to be used for treating water that is micro-biologically unsafe or of unknown quality without adequate purification before or after the system.
- Do not subject the water softener to freezing temperatures.
- Do not treat water above 50°C.
- Read the manual properly and follow instructions given therein.

Exploded Diagram of KENT MINI

KENT MINI Water Softner	
S.No.	Description
1	3 Way Connector
2	Ball Valve 3/8"
3,5 & 26	White Pipe 3/8"
4 & 23	T-Ball Valve Inlet / Outlet Side
6	Union Elbow
7	White Pipe 1/4"
8	Elbow
9	Plastic Hex Fitting
10	Silicon Washer
11	Plastic Hex Nut
12	Brine Chamber
13	Brine Chamber Lid
14	M6 Hex Bolt
15	Mounting Bracket
16 & 22	Inlet / Outlet Fitting
17	Housing Cap
18	Resilient Washer
19	Resin Cartridge
20	Guide Ring For Resin Cartridge
21	Resin Housing
24	O-Ring
25	Fitting For Washing M/c, Geyser etc
26	Drain Pipe
27	Plastic Wall Insert
28	Screw For Wall Mounting
29	Brine Mesh



Installation

a) Instructions

Recommended site preparations:

The softener should be installed near the raw water supply with 1/2" nipple and not more than 2.5 metres away from the source.

The drain of the reject water should not be more than 2.5m away (according to the length of the pipe provided)

Installation space should be according to the dimensions of the softener with easy access.

For holding the machine securely please ensure mounting is done on a plane surface.

Avoid installation on wooden and metallic stands.

Kindly Install softener near a place which has easy availability of inlet and reject water lines.

b) Procedure

After finalising the location of the area for mounting the softener:

- 1) Paste the Centre Drill Sticker on the wall space to drill holes for the self tapping screws provided with the machine.
- 2) Insert the plastic inserts in the drilled holes and screw the self tapping screws 3.1 inches (78mm) apart horizontally.
- 3) Mount the softener on the wall with the help of slots given at the back of the machine
- 4) Fasten the SS ball valve to 1/4" port of 3 way connector.
- 5) Attach the threaded end of 3 way connector to raw water supply and plug off the other end or connect to a tap.
- 6) Now connect one of the white pipe to the SS Ball valve and the other end to the lower end of the T Ball valve labelled as IN on the left side of the softener.
- 7) Now connect the upper end of the right hand side T Ball valve to your Washing machine/Geyser/Dishwasher. Please use appropriate fitting for this purpose.



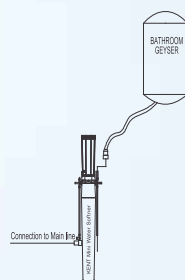
- 8) Connect the white pipe for draining on the lower side on the right side of ball valve and modify length according to the distance of the drain water outlet.
- 9) The installation of the softener is complete now.
- 10) Follow the regeneration procedure shown on the machine and also under 'How to operate 'on page 6.
- 11) Now your KENT Mini Softener is ready for use.

How to Install

A Geyser / Washing Machine / Dishwasher

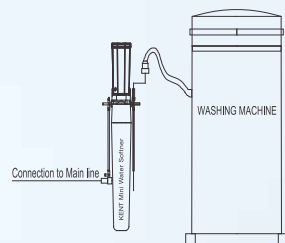
How to install KENT Mini Softener with a Geyser?

1. Please refer to the installation of the KENT Water Softener as per 'Installation' on page no.4
2. Attach the suitable fitting (refer to S.No. 25 shown on page 3) on the outlet of the softener.
3. While fitting please note the outlet of the softener should be attached to the inlet of the geyser.



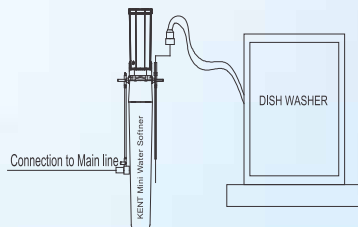
How to install Kent Mini Softener with a Washing Machine?

1. Please refer to the installation of the KENT Water Softener as per 'Installation' on page no.4
2. Attach the suitable fitting (refer to S.No. 25 shown on page 3) on the outlet of the softener.
3. While fitting please note the outlet of the softener should be attached to the inlet of the washing machine



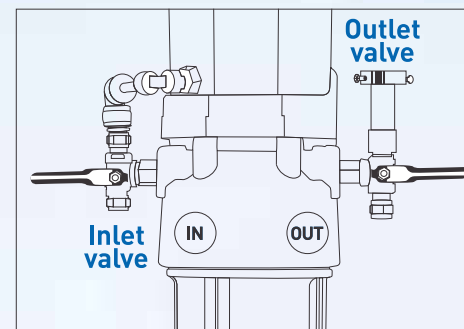
How to install KENT Mini Softener with a Dishwasher?

4. Please refer to the installation of the KENT Water Softener as per 'Installation' on page no.4
5. Attach the suitable fitting (refer to S.No. 25 shown on page 3) on the outlet of the softener.
6. While fitting please note the outlet of the softener should be attached to the inlet of the dishwasher



How to Operate

During normal operation keep Inlet Water Valve (Left Hand Side Valve) & Outlet Water Valve (Right Hand Side Valve) both in HORIZONTAL position.

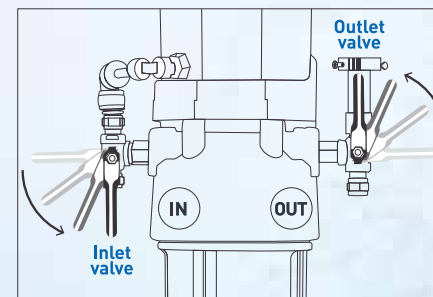


Regeneration Process

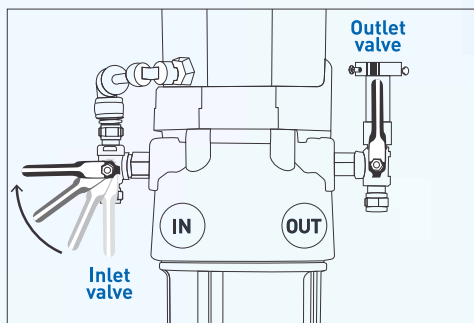
After 100 to 200 litres of water usage (based on hardness of water) regeneration is required to bring Softener Resin to its full power for water softening. This process is done as under:

Inlet Water Valve = Left Hand Side Valve, Outlet Water Valve = Right Hand Side Valve

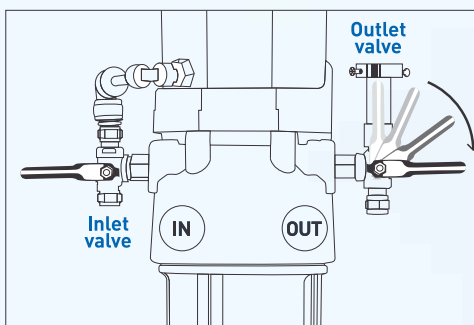
1. Before starting regeneration ensure that salt chamber is filled with water and has 250 gms. (1 packet) of KENT Softener salt dissolved in water.
2. Rotate Inlet Water Valve and Outlet Water Valve in anti- clockwise position so that the position of both the valves becomes Vertical.



- Wait for 15 minutes. During this time contents of salt chamber will pass through and bottle will become empty in 4-5 minutes time. Thereafter for next 10 minutes salt will react with Resin in the lower resin housing.
- Now rotate Inlet Water Valve clockwise to bring it back to Horizontal position and thereafter allow water to pass through for 5 minutes.



- Now rotate back Outlet Water Valve to Horizontal position.



- Softener after regeneration is now ready for use.
- At this time fill up the salt chamber with one packet of KENT Softener salt and fill up the chamber with water. This will ensure that the chamber is ready with dissolved salt whenever one requires regeneration after 100 to 200 litres of water usage.

Precautions

Keep Inlet Water Valve & Outlet Water Valve in HORIZONTAL position during normal operations and in VERTICAL position during regeneration. Never keep these two valves at any other angle at any time otherwise water may enter in the wrong compartment.

Maintenance

Change of Resin Cartridge

Normal life of the Resin (Resin cartridge is fitted inside the long housing) is six months. Replace it every 6 months or get it cleaned from service technician as and when required.

Use of Regeneration Salt

Use only KENT Softener Salt (packed in 250 gms packing) for regeneration. This is readily available with KENT Mini Softener dealers or contact us as under:

KENT RO Systems Ltd. 1800-100-1000 (Toll Free)

Warranty Card

(For Sale through Dealer)

Product : **KENT MINI SOFTENER**

Serial No. :

Customer Details:

Customer's Name _____

Customer's Address _____

Customer's Ph. No. _____

Warranty Details:

Invoice Date _____ Invoice No. _____

Date of Installation _____ Stamp of Service Provider _____

For Service Contact:

Service Provider's Name _____

Service Provider's Address _____

Ph. No. _____

Marketed by: **KENT RO SYSTEMS LTD**

E-6, 7 & 8, Sector-59, Noida, UP - 201 309, India
Phone: +91-1203075075
E-mail: service@kent.co.in Website: www.kent.co.in
Customer Care: 1800 100 1000 (Toll Free)

Product : **KENT MINI SOFTENER**

Installation Report

Serial No.

Customer's Name _____

Customer's Address _____

Customer's Ph. _____

Customer's Signature _____

Invoice No. _____

Invoice Date _____

Installation Date _____

Service Provider _____

Service Provider's Address _____

Service Provider's Ph. _____

Service Provider's Stamp _____

By signing on this installation report, the customer hereby agrees to the terms & conditions of warranty mentioned on the back side of the warranty card

Terms & Conditions of Warranty

KENT warrants all new products manufactured by it to be free from defects in material and workmanship under normal usage and service from the date of purchase as under:

1. The Warranty period commences from the date of purchase by the first end-user. During this Warranty period of one year, KENT or its Authorised Service Provider (ASP) will replace or repair any part of the KENT Mini Water Softener, that in the opinion of KENT or its ASP, would be defective in operation due to faulty material or workmanship (i.e. manufacturing defects).
2. The product's plastic body is not covered under Warranty and hence, it must be handled with care to guard against breakage.
3. The original purchaser of the unit can avail services under Warranty at the point of sale, by producing the damaged part(s) along with the original invoice.
4. This Warranty is void if the unit is not operated under normal municipal water or well water conditions or is subjected to the temperature above 50°C.
5. Product returned to KENT or its ASP for Warranty examination must be shipped freight prepaid.
6. KENT or its ASP shall not be held liable for claims exceeding the cost of repair of the defects in workmanship.
7. This Warranty Agreement shall not be interpreted to render KENT or its ASP liable for injuries or damages of any kind - direct, consequential or contingent to persons or property.
8. KENT or its ASP shall not be held responsible by representative or buyer for failure to abide by any of the obligations of this Warranty Agreement if such failures are the result of circumstances of Forces Majeures: such as, but not limited to, floods, earthquakes, transportation strikes, labour disputes with outside suppliers or any other conditions beyond the control of KENT or its ASP.
9. KENT or its ASP shall not be held liable for repair or alterations made without prior written approval; for products clogged by suspended matter, precipitates or biological growth; or for failures resulting from the lack of proper maintenance.
10. This Warranty Agreement excludes all products/component parts or damage to any part of this Water Softener which, in the opinion of KENT or its ASP, have been subjected to misuse; misapplication; negligence; alteration; accident or operation contrary to our instructions, incompatibility with accessories not installed by KENT or its ASP, or that have been repaired with component parts other than those manufactured by or obtained from KENT or its ASP. Damage caused by freezing, flood, fire or Act of God is not covered by this Warranty. In all such cases regular charges will apply. This limited Warranty does not include service to diagnose a claimed malfunction in this unit.
11. KENT reserves the right to alter or improve design and specifications at any time, without any contingent obligations to prospective buyers or owners of the products previously sold.
12. Any disagreements and obligations based upon the purchase of KENT products and thereby imposed on KENT or its ASP shall be governed by and construed according to the laws of INDIA and subject to the jurisdiction of Delhi Courts only.
13. KENT or its ASP assumes no Warranty liability in connection with this water softener other than that specified herein. This Warranty is in lieu of all other warranties, expressed or implied, including warranties of fitness for a particular purpose. KENT or its ASP does not authorize any person or representative to assume for them any other obligations on the sale of this water purifier.
14. Under no circumstances are the terms mentioned above negotiable and no employee of KENT or its ASP has the authority to supersede them.



To,

KENT RO SYSTEMS LTD

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