

**KENT**  
**Mineral RO™**  
 Water Purifiers  
**HOUSE of PURITY**



\*To request for service 24x7, download KENT Service App



by scanning the QR code or by giving a missed call: 9212252852

To speak to customer care executive call: 92-789-12345



Marketed by:  
**KENT RO SYSTEMS LTD.**  
 E-6, 7 & 8, Sector-59, Noida, U.P.-201 309, India.  
 E-mail: sales@kent.co.in | Website: www.kent.co.in

Manufactured by:  
**KENT RO SYSTEMS LTD.**  
 1) Khasra No. 93, Village-Bantakhedi, Tehsil-Roorkee, District-Haridwar, Uttarakhand-247 668, India.  
 2) A-6, Sector-87, Noida-201 305, U.P., India.

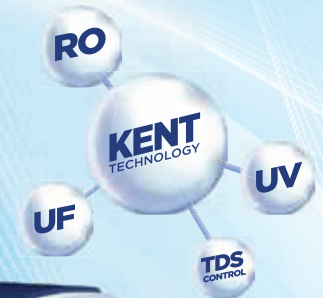
For customer complaints, contact our Customer Care Officer at:  
 E-6, 7 & 8, Sector-59, Noida, U.P.-201 309, India. Call: 92-789-12345  
 E-mail: service@kent.co.in or visit us at www.kent.co.in

**KENT Sterling Star**  
 Under-the-counter RO Water Purifier  
 RO+UV+UF+TDS Control  
 Digital Display of Minerals and Purity

**KENT**  
**Mineral RO™**  
 Water Purifiers  
**HOUSE of PURITY**



- Very high purification capacity 25l/hr
- 6l in-built storage tank
- Smart space-saving design
- Helps maintain décor of your kitchen



**Sabse Shudh Paani**  
 Piyo Aur Healthy Raho

Built-in Hydrostatic Tank

**SINGLE CABINET**

# Welcome to KENT

Dear Customer,

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

We are confident that your decision to own **KENT Sterling Star Mineral RO™ Water Purifier** will go a long way in serving you with pure and mineral enriched drinking water, thus keeping you and your family in good health. 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 familiarising you with the operation and maintenance of **KENT Sterling Star Mineral RO™ Water Purifier**. 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.

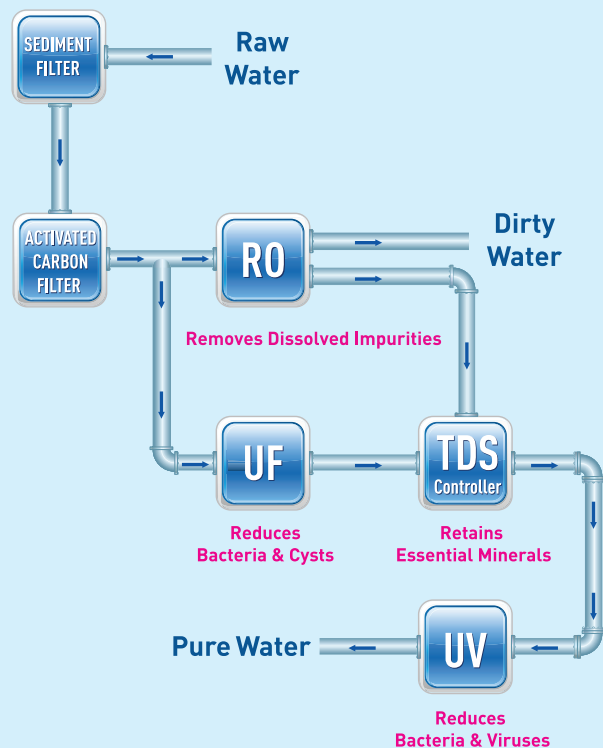
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## KENT TECHNOLOGY - A Breakthrough in Water Purification\*

KENT proudly presents **KENT Sterling Star Mineral RO™ Water Purifier** - a new and advanced domestic water purifier which provides pure & healthy drinking water.

The futuristic **KENT Sterling Star Mineral RO™ Water Purifier**, developed at KENT Laboratory broadly comprises of state-of-the-art RO+UV+UF+TDS+Digital Display of minerals and purity Control System. The initial purification by RO membrane having porosity as fine as 0.0001 microns reduces even the dissolved impurities (hard salts, heavy metals, etc.). Double purification by UV membrane gives additional protection from deadly harmful micro-organisms. Moreover, the patented TDS Control System intelligently retains essential natural minerals in purified water, thus taking total care of your health and wellbeing.



\* Tested & certified by TUV-SUD South Asia (P) Ltd.

## Salient Features of KENT Sterling Star Mineral RO™ Water Purifier

1. Compact single cabinet design for under-the-counter placement.
2. Purification by RO+UV+UF+TDS control makes water pure.
3. Retains essential natural minerals in water with TDS Control Valve.
4. Real time monitoring and display of purity on a digital screen.
5. 6 litres inbuilt hydrostatic storage tank makes purified water available on demand.
6. Fully automatic operation with auto-on/off.
7. Suitable for brackish / tap water/ municipal water supply.
8. Suitable for purification of blackish/tap water/municipal corporation water supply.
9. Tamper-proof RO Purifier.
10. Membrane fused inside membrane housing.
11. Ideal for under-the-counter as well as side-by-side placement adjacent to refrigerator.
12. Computer controlled operations for enhanced purity and long life.
13. Very High Purification capacity of 25l/hr



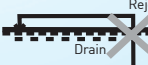
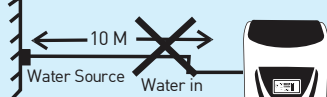
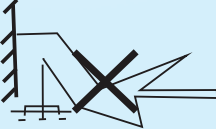
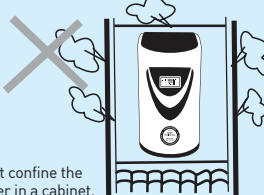

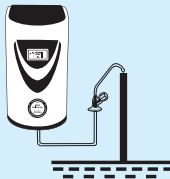




### Items in the Box

1 KENT Sterling Star Mineral RO™ Water Purifier	: 1 N
2 3-Way Connector	: 1 N
3 S.S. Ball Valve	: 1 N
4 Faucet	: 1 N
5 Instruction Handbook	: 1 N
6 Food Grade Pipe ¼" (Blue)	: 2.5 m
7 Food Grade Pipe ¼" (White)	: 2.5 m
8 Food Grade Pipe ⅜" (white)	: 2.5 m

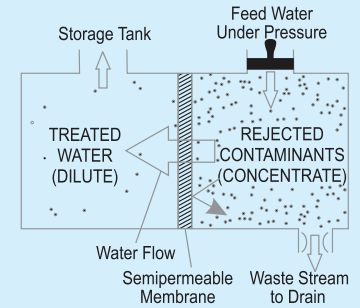
\*Tested & certified by TUV-SUD South Asia (P) Ltd.

## Important Instructions

 <p>Avoid exposure to direct sunlight and installation in damp areas.</p>	 <p>Make sure that the purifier is connected to normal temperature water supply only.</p>
 <p>Make sure that the rejected water pipe is not placed at a level higher than the purifier, otherwise rejected water may flow backwards into the purifier.</p>	 <p>Maximum distance between the water source and purifier should not be more than 3 meters.</p>
 <p>Avoid sharp bends in pipes.</p>	 <p>Do not confine the purifier in a cabinet.</p>
 <p>In case of not using the purifier for more than two days, kindly switch off the power supply and drain out the storage tank.</p>	 <p>To keep the storage tank clean, it should be drained once in 15 days.</p>
 <p>Use Genuine KENT spares for optimum performance.</p>	 <p>Do not try to service the purifier on your own. Instead, call service technician for help.</p>

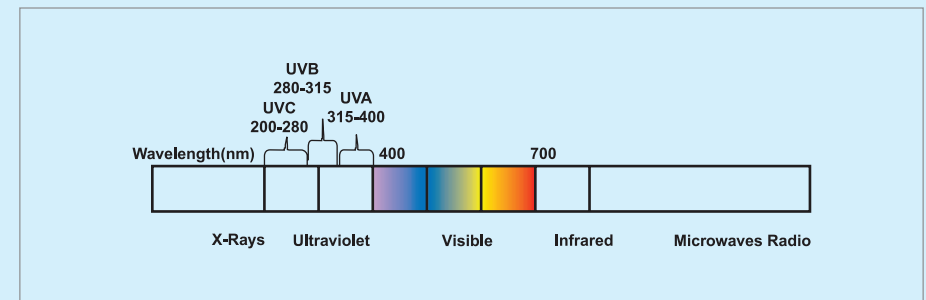
## Reverse Osmosis Process

Reverse Osmosis process, also known as hyper filtration, is the finest filtration process known till date. It ensures reduction of particles as small as ions from a solution. Reverse Osmosis process uses a semi-permeable membrane to reduce salts from potable/brackish water. In Reverse Osmosis, water pressure is applied to the inlet impure water resulting in squeezing of pure water from the concentrated end of membrane towards the diluted end. Dissolved salts present in water as charged ions, get repelled by the RO membrane and are not allowed to pass through. Similarly, bacteria and germs are also blocked by the ultra fine pores of the RO membrane. These rejected impurities suspended on the concentrated end of the membrane are washed away in a stream of waste water, preventing the membrane from clogging.

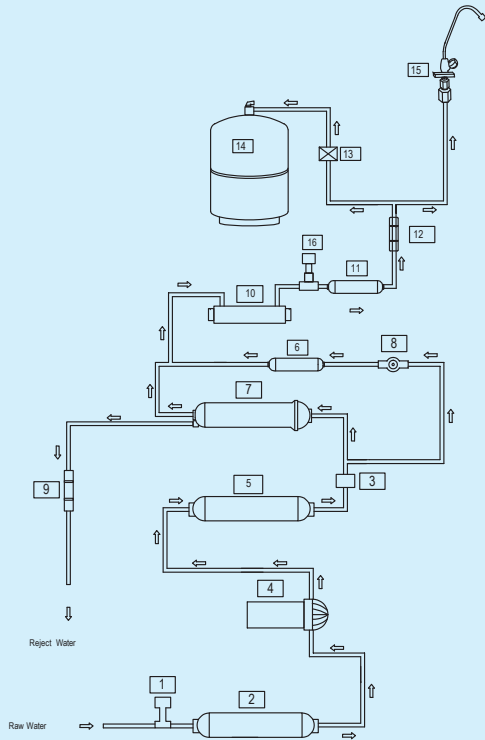


## UV Process

The UV light has shorter wavelength (higher energy) than the visible light. It is called ultra-violet because it is just beyond violet light in the light spectrum. Technically, the ultra-violet light is defined to be any wavelength of light, which is shorter than 400 nanometer. UV rays, which penetrate into the micro-organisms, are absorbed by the DNA of the pathogen in the water. The DNA is altered in such a way that the pathogen cannot reproduce itself. Thus, it is essentially killed and cannot cause infection. This process of DNA modification is called inactivation.



## Water Flow Diagram



S.NO.	SP. CO.	ITEM DESCRIPTION
1	20035	LOW PRESSURE SWITCH
2	20010	SEDIMENT FILTER
3	20028	SOLENOID VALVE
4	20005	BOOSTER PUMP
5	20009	ACTIVATED CARBON FILTER
6	20003	UF FILTER
7	20758	RO MEMBRANE SHF
8	20034	TDS CONTROL VALVE
9	20020	FLOW RESTRICTOR TUBE
10	20541	UV CHAMBER
11	20015	POST CARBON FILTER
12	20058	NON RETURN VALVE
13	20036	HIGH PRESSURE SWITCH
14	20386	HYDROSTATIC STORAGE TANK
15	20183	FAUCET
16	20441	TDS SENSOR

## Warranty Card

Product: **KENT Sterling Star**

Product Code: 11139

It is certified that KENT RO Water Purifier purchased as under w.e.f. 1<sup>st</sup> Jan. 2018 carries 1 Year Warranty + 3 Years of Free Service\*. (Visit/Service charges will not be charged, however parts if replaced shall be charged)



Serial No. ....

Purchase Date.....Installation Date.....

Service Provider's Name & Address with Stamp

\*To avail this scheme of 3 Years of Free Service, customer must download the KENT Service App at the time of installation. Also future service request must be raised via KENT Service App to avail free service. Terms & Conditions applicable are mentioned overleaf.



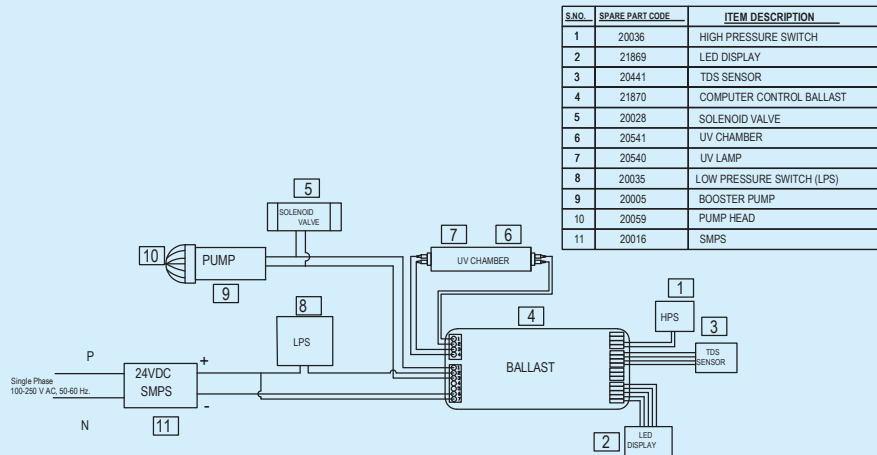
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by scanning the QR code or by giving a missed call: 9212252852



To speak to customer care executive call: 92-789-12345

## Electrical Circuit Diagram



S.NO.	SPARE PART CODE	ITEM DESCRIPTION
1	20036	HIGH PRESSURE SWITCH
2	21869	LED DISPLAY
3	20441	TDS SENSOR
4	21870	COMPUTER CONTROL BALLAST
5	20028	SOLENOID VALVE
6	20541	UV CHAMBER
7	20540	UV LAMP
8	20035	LOW PRESSURE SWITCH (LPS)
9	20005	BOOSTER PUMP
10	20059	PUMP HEAD
11	20016	SMPS

## 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. It is essential for the customer to download the KENT Service App either on Android or iOS and the customer should lodge a service request via App only.
2. In case of emergency during the warranty period, the customer may lodge a service request at our Call Centre Ph. 92-789-12345.
3. The warranty period commences from the date of installation by the first end-user. During this warranty period of one year, KENT Purifiers or its Authorised Service Provider (ASP) will replace or repair any part of KENT Purifiers, that in the opinion of KENT Purifiers or its ASP, would be defective in operation due to faulty material or workmanship (i.e. manufacturing defects) with the exception of consumables such as Sediment Filter, Carbon Filter and RO/UF Membrane. However, if the RO/UF Membrane gets clogged within first one year and/or if the filters get clogged within first six months, they shall be cleaned / repaired / replaced at no extra charge.
4. In addition to this, KENT will also provide free service for a period of next 3 years, wherein Visit/Service charges will not be charged, however parts if replaced shall be charged.
5. Visit/Service charges will not be charged only for customers residing within 25kms of municipal limits, for other areas additional charges shall be applicable.
6. The product's plastic body is not covered under warranty and hence, it must be handled with care to guard against breakage.
7. 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.
8. 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 40°C.
9. Product returned to KENT Purifiers or its ASP for warranty examination must be shipped freight prepaid.
10. KENT Purifiers or its ASP shall not be held liable for claims exceeding the cost of repair of the defects in workmanship.
11. This warranty agreement shall not be interpreted to render KENT Purifiers or its ASP liable for injuries or damages of any kind-direct, consequential or contingent to persons or property.
12. KENT Purifiers 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 Purifiers or its ASP.
13. KENT Purifiers 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.
14. KENT Purifiers or its ASP cannot and shall not be held liable for any sickness or illness due to the consumption of drinking water from any water purifier supplied by KENT Purifiers, since KENT Purifiers or its ASP does not have any control over the maintenance and usage of water purifier.
15. This warranty agreement excludes all products/ component parts or damage to any part of this water purifier which, in the opinion of KENT Purifiers 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 Purifiers or its ASP, or that have been repaired with component parts other than those manufactured by or obtained from KENT Purifiers 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.
16. KENT Purifiers 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.
17. Any disagreements and obligations based upon the purchase of KENT Purifiers products and thereby imposed on KENT Purifiers or its ASP shall be governed by and construed according to the laws of INDIA and subject to the jurisdiction of Delhi Courts only.
18. KENT Purifiers or its ASP assumes no warranty liability in connection with this water purifier 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 authorise any person or representative to assume for them any other obligations on the sale of this water purifier.
19. Under no circumstances, the liability of KENT Purifiers or its ASP shall exceed the value of the product.
20. Under no circumstances are the terms mentioned above negotiable and no employee of KENT Purifiers or its ASP has the authority to supersede them.

### Why is it essential to download the KENT Service Application?

1. Customer can lodge a service request/complaint anytime (24x7).
2. The customer can track/monitor the progress of service request/complaint.
3. Complete case history of the services done can be viewed.
4. Regular feedback & offer details on the App.



To download the App scan the QR code

Affix  
Stamp  
here

To,

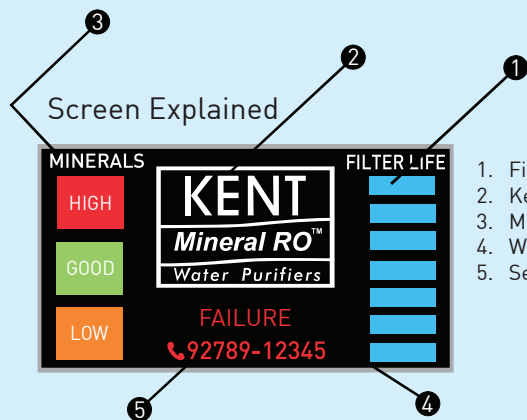
**KENT RO SYSTEMS LTD.**

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Ph.: 92-789-12345

E-mail: [service@kent.co.in](mailto:service@kent.co.in) | Website: [www.kent.co.in](http://www.kent.co.in)

## Sterling Star Operations



1. Filter Life Indicator
2. Kent Logo
3. Mineral Content In Purified Water
4. Warning Indicator
5. Service Help line number

### Normal Runing Condition



Under normal runing condition and without any fault, the users will be greeted with a screen as shown in figure

### Mineral Content - Good



If the TDS level in the purified water is within the permissible range, the indicator would be in green Zone i.e Good

### Mineral Content - High



If the TDS level in the purified water is more than permissible range, the indicator would be in Red Zone. i.e High

## Installation Report

Product : **KENT Sterling Star**

Serial No. \_\_\_\_\_

Customer's Name \_\_\_\_\_

Customer's Address \_\_\_\_\_

\_\_\_\_\_

Customer's Ph. \_\_\_\_\_

Customer's Signature \_\_\_\_\_

Invoice No. \_\_\_\_\_

Invoice Date \_\_\_\_\_

Installation Date \_\_\_\_\_

Service Provider's Name \_\_\_\_\_

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*

### Mineral Content - Low



If the TDS level in the purified water is less than permissible range, the indicator would be in Yellow Zone. i.e Low

### UV tube/ Inlet SV or RO Pump/ Auto Flush SV Fault



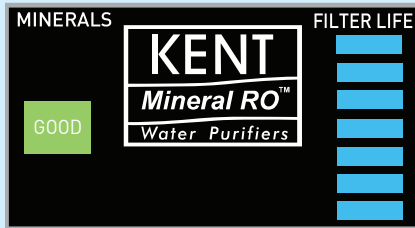
Failure and Call Service Icon will be ON Continuously.

**UV Fault:**  
Buzzer will beep continuously @ 50mSec ON, 1.5Sec OFF rate.

**Inlet SV or RO Pump Fault:**  
Buzzer will beep continuously @ 50mSec ON, 1Sec OFF rate.

**AF SV Fault:**  
Buzzer will beep continuously @ 50mSec ON, 0.5Sec OFF rate.

### No Input Water1



In case of no water input, Kent logo will be blinking, that means no water input

### Filter Replacement Pre Indication



Service call number will be continuous ON. Filter life last bar will be blinking

Buzzer will beep for 4 times at an interval of 2 seconds once for 30 seconds. This will repeat in every 2 Hrs

Call service engineer for help

### TDS Sensor Fault



HIGH, GOOD & LOW TDS bands will be blinking  
Service call number will be continuous ON. No Buzzer Sound for TDS Sensor Fault

### End of Filter Life Lock



Service call number will be continuous ON. Filter life all bars will be blinking

If Product is in standby mode then Buzzer will turn ON continuous

Call service engineer for help

### UV Lamp Open/ Not present



Failure and Call Service Icon will be ON Continuous. Buzzer will beep twice at an interval of 9 Secs for 50 cycles. After 50 cycles buzzer will go OFF



## Automatic Operation

- The purifier automatically shuts off when the storage tank is full
- The purifier does not start when inlet water supply pressure falls below 0.3 kg/cm<sup>2</sup>
- The purifier automatically restarts when water level drops below the maximum
- The purifier doesn't allow any water rejection in absence of electricity or when the tank is full

## Installation Instructions

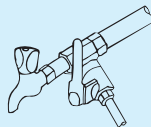
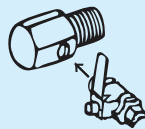
**KENT Sterling Star Mineral RO™ Water Purifier** is a convenient and user-friendly under-the-counter model.

### Recommended Site Preparations:

- Single Phase 100-250 V AC, 50-60 Hz. supply, not more than 3 m away from the point of installation
- Raw water supply with ½ inch nipple not more than 3 m away
- Drain for reject water not more than 3 m away
- Installation space as per the dimensions of the purifier
- For optimum inlet pressure, source water tank should be at least 10 ft above the installed purifier
- Install the purifier near a sink for easy availability of inlet and reject water lines
- The system and installation need to comply with state and local laws and regulations

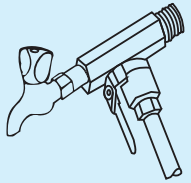
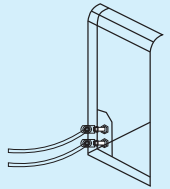
### Installation Procedure:

- Fix the SS ball valve to the ¼ inch port of the 3-way connector as shown in the figure
- Connect the 3-way connector to the raw water supply as shown in the figure. The threaded end of the 3-way connector is fit in-line with the raw water supply. The other end can be connected to a tap or plugged off, if not required
- Now connect one end of the white pipe ¾" to the SS ball valve and other end to the lower pushfit elbow fitting on the back side of the purifier labeled as 'Water In'
- Similarly, connect one end of the blue pipe to the fitting connector labeled as 'Reject Water' and leave the other end in the drain



☞ Use blue pipe for reject water.

- Install the faucet on the kitchen sink or the slab. Connect one end of the white pipe ¼" to the faucet and the other end to the fitting connector labeled as 'Faucet'
- Before connecting the power supply, it is important that you perform the following functions:
  - Open the SS ball valve (Handle parallel to the ball valve) to start the flow of water into the purifier
  - Wait for 2-3 minutes to ensure that the filters are soaked in water



## TDS Adjustment\*

The unique TDS Controller enables customers to retain the contents of natural minerals in purified water, as per their requirement.

- Turning the screw of the valve anticlockwise, results in an increased mineral content
- Turning the screw of the valve clockwise results in a decreased mineral content

☞ We recommend keeping the TDS at the lowest possible level but not below 50mg/l.

## Starting-up the Purifier

- Switch on the power supply
- Wait approximately for half an hour so that the storage tank is full\*\*
- Switch off the power supply
- Drain off the storage tank by opening the faucet to remove any dust particles from the pipe and storage tank
- Close the faucet & switch on the power supply
- The purifier is ready to use

\* Tested & certified by TUV-SUD South Asia (P) Ltd.

\*\*Tested & certified Flushing Time - 24 Hours.

## Recommended Usage of Rejected Water

Although the rejected water has high concentration of salts, it is absolutely clean and free from impurities like chlorine, dirt, sand, etc. This rejected water usually goes down the drain, but it can be used for gardening purposes. The high concentration of salts and minerals accelerate plant growth. Rejected water can also be used for cleaning utensils, mopping, etc.

## Maintenance

To ensure that the purifier operates at its best, a routine maintenance must be performed. The frequency of the maintenance will greatly depend upon the raw water quality and consumption of purified water.

- Storage tank must be drained once in a week
- Replace sediment filter and activated carbon filter once in 12 months or earlier if they get clogged. It is recommended to change the FRT along with the filters
- Replace RO membrane once in a year or earlier if it gets clogged
- Replace UV lamp once a year
- In the event of not using the purifier for a long time (while going for a holiday, tour, etc.), ensure that you disconnect the power supply, turn off the raw water supply and drain out the storage tank

### Replacement of spare parts are as under:

- 20010 SP Inline Sediment Filter 8"
- 20009 SP Inline Carbon Filter 8"
- 20758 SP RO Membrane SHF
- 20015 SP Post Carbon Filter (Blue)
- 20003 SP Hollow Fibre Membrane (RO)
- 20020 SP FRT 300/450

**Note:** Filters and membranes are consumables. Their replacement time is dependent on the quality of raw water and water consumption. They are not covered under the warranty. However, if a filter chokes within six months and a membrane within a year, it will be cleaned/repaired/replaced free of cost. Changing the filters and system inspection is available on call. The treatment capacity of RO membrane will reduce with time due to clogging of pores of membranes.

This reverse osmosis system contains a replaceable component critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specifications as defined by the manufacturer, to ensure the same efficiency and contaminant reduction performance.


## Important Safety Instructions

1. If the supply cord is damaged, it must be replaced by the original part in order to avoid hazard.
2. Children should be supervised to ensure that they do not play with the appliance.
3. This appliance is not intended for use by persons (including children) with reduced physical or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

## Warning

- Do not operate the UV-C emitter when it is removed from the appliance enclosure.
- Read the maintenance instructions before opening the appliance.
- The appliance must be disconnected from the supply before replacing the UV-C emitter.

## Technical Specifications

Product	KENT Sterling Star
Product Code	111139
Product Generic Name	Water Purifier
Product Colour	White
Applications	Suitable for Brackish/Tap Water/Municipal Water Supply
Purification Production Rate	Upto 25 l/hr.*
Body Material	ABS Food Grade Plastic
Mounting	Under-the-counter
Dimensions (mm)	455 (L) x 245 (W) x 420 (H)
Inlet Water Pressure / Temp. (Min.)	0.3 kg/cm <sup>2</sup> /10° C
Inlet Water Pressure / Temp. (Max.)	4.0 kg/cm <sup>2</sup> /40° C
Min./Max. Operating pH	6.5-8.0
Filter Cartridge	Sediment, Activated Carbon, UF and Post Carbon
UV Lamp Wattage	11 W
Life of UV Lamp	5000 hrs. of operation
UF Membrane	0.01-0.1 microns
RO Membrane	Thin Film Composite RO
Storage Capacity	6 Litres
Maximum Duty Cycle	125 l/day
Net Weight	12.1 kg
Booster Pump Voltage	24V DC
Total Power Consumption	60 W
Input Power Supply	Single Phase 220±250 V, AC, 50 Hz. 
IP Number	IPX1

\* Purification capacity tested for raw water having TDS level of 750 ppm at room temperature.

## Testing Information

The System has been tested according to IS 10500:2012 (Standards for drinking water as per Bureau of Indian Standards) for reduction of the hazardous substances.