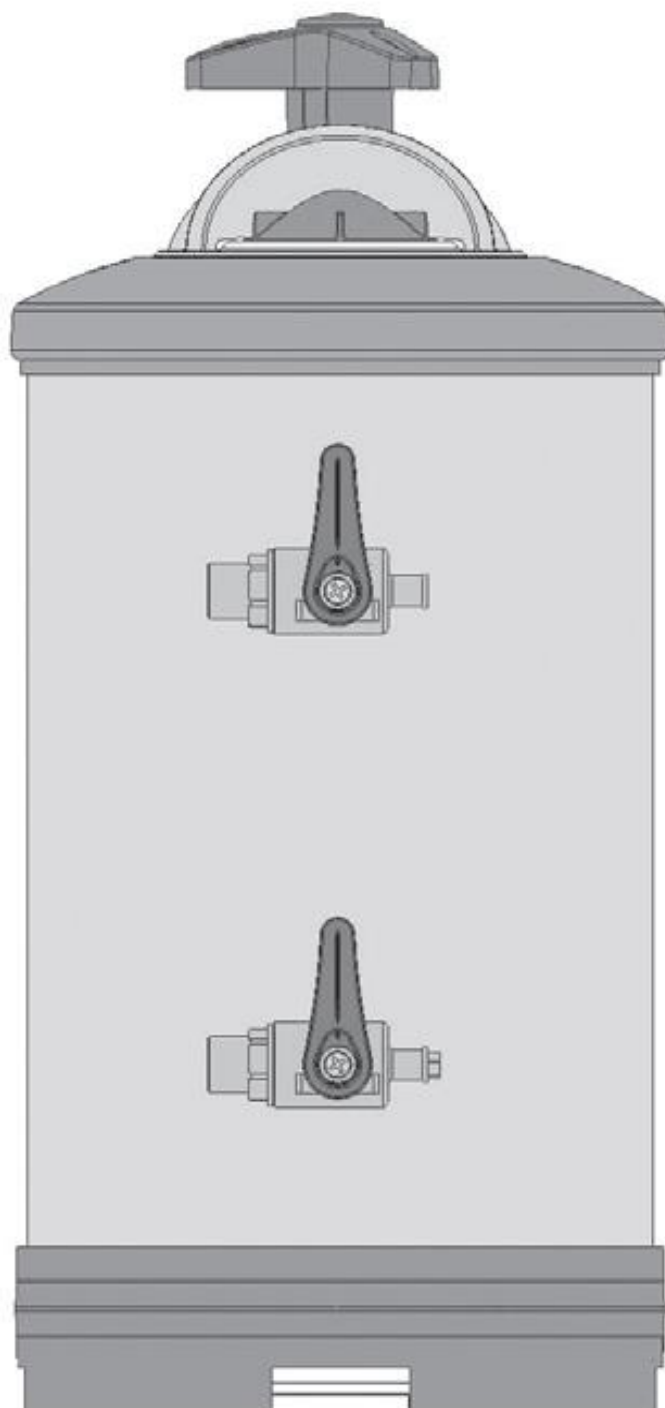


# USER'S MANUAL

Model Name : LT5



Published by **SJE Corporation, Ltd.**

©2022 by **SJE Corporation, Ltd.**

78-21 Sandan 7-ro, Jeonggwan-Eup, Gijang-Gun,

Busan, South Korea

Tel : +82 51-521-3200

Fax : +82 51-521-3305

Website : [www.sjecorp.com](http://www.sjecorp.com)

E-mail: [sales@sjecorp.com](mailto:sales@sjecorp.com)

*All rights reserved. No Part of this publication may be reporduced,  
stored in a retrieval system, or transmitted, in any form or by any means,  
electronic, mechanical, photocopying, recording, or otherwise, without  
the prior permission of SJE Corporation, Ltd.*

**SJE Corporation, Ltd.**



# **USER'S MANUAL**

**Model Name : LT5**

Contact Information :

# **INDEX**

## **1. GENERAL INFORMATION**

- 1.1 OBJECTIVE OF THE MANUAL
- 1.2 STORAGE OF THE MANUAL
- 1.3 EQUIPMENT IDENTIFICATION
- 1.4 HYGIENIC SAFETY

## **2. INTRODUCTION**

- 2.1 DESCRIPTION
- 2.2 COMPONENTS AND IDENTIFICATION
- 2.3 PACKAGE CONTENTS
- 2.4 TECHNICAL FEATURES
- 2.5 FEED WATER CHARACTERISTICS
- 2.6 REGENERATION CYCLE
- 2.7 SPECIFICATIONS

## **3. INSTALLATION**

- 3.1 PACKAGING
- 3.2 INSTALLATION LOCATION AND WATER PRESSURE
- 3.3 HOW TO INSTALL AT OPTIMA
- 3.4 INLET AND OUTLET HOSE CONNECTIONS
- 3.5 DRAIN HOSE CONNECTION
- 3.6 RINSING THE RESIN

## **4. ION RESIN REGENERATION METHOD**

## **5. MAINTENANCE**

- 5.1 REPLACEMENT OF THE RESIN
- 5.2 RESIN PRESERVATION

## **6. IMPROPER USE**

## **7. EQUIPMENT DISPOSAL**

# 1. GENERAL INFORMATION

## 1.1 OBJECTIVE OF THE MANUAL

- Its purpose is to provide users with useful information about the equipment and how to use it safely.

**✘ The manufacturer and distributor are not responsible for mechanical failure or human or material damage caused by the user's negligence in the user manual.**

## 1.2 STORAGE OF THE MANUAL

- The manual is an essential part of the product and should be stored carefully and provided with equipment transfer.

## 1.3 EQUIPMENT IDENTIFICATION

- The equipment identification is indicated in bold on the lower left corner of the Nameplate(Fig.1, L) on the back of the softener tank, packaging and user manual.

## 1.4 HYGIENIC SAFETY

- To maintain hygienic safety, it is recommended to take the equipment out and install it directly.
- To ensure hygienic safety, you must purchase and replace genuine products for maintenance.

## 1.5 STORAGE RECOMMENDATIONS AND WARNINGS

### EQUIPMENT STORAGE

- A storage temperature between 0 and 35 °C is recommended.
- It is recommended to use the equipment within 24 months after purchase.

### WARNINGS

- It is recommended to read the manual carefully before installing the equipment.
- It is not recommended to use by children, the elderly and those who do not know how to use the equipment.
- In case of any problems, please contact the seller.
- Do not touch or use the softener with wet hands or feet.
- For regeneration and regular salt replenishment, read "ION RESIN REGENERATION METHOD".
- Cleaning the softener is part of the user's duties.

**✘ The manufacturer and distributor are not responsible for any damage by not following these warnings.**

## 2. INTRODUCTION

### 2.1 DESCRIPTION

- This equipment is designed to remove calcium and magnesium ions found in hard water by exchanging them with sodium ions.
- After a certain amount of use of the ion exchange resin, its concentration of NaCl(sodium chloride) is lowered and the cation can no longer be removed.
- If the cation cannot be removed, it needs to be regenerated using pure salt(NaCl).

### 2.2 COMPONENTS / IDENTIFICATION

#### EQUIPMENT COMPONENTS

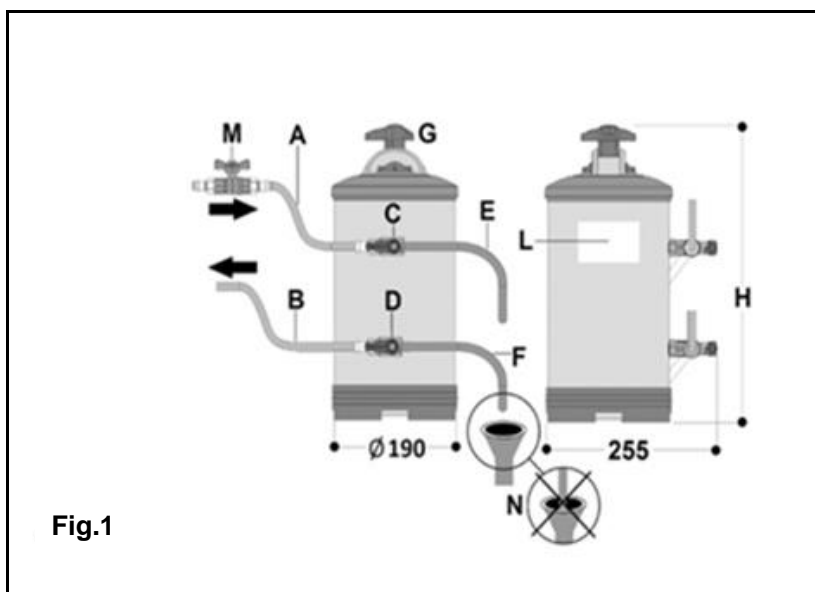
- Tank with soft water resin x 1 EA
- 3-way valves(Fig. 1, C-D) x 2 EA
- Tank cap(Fig. 1, G) x 1 EA

#### EQUIPMENT IDENTIFICATION

- Refer to Fig.1 Equipment Identification

### 2.3 PACKAGE CONTENTS

- Softener x 1 EA
- User manual x 1 EA
- Hose(Fig.1, E-F) x 2 EA



### 2.4 TECHNICAL FEATURES

- Feed water pressure : 1 ~ 8bar
- Flow rate at 4 bar : 1000 l/h
- Operating temperature : 4°C ~ 35°C
- Inlet / Outlet hose connectors : 1/2M(Fig.2)

### 2.5 FEED WATER CHARACTERISTICS

- Water : tap water
- Temperature : 6° ~ 25°C
- Hardness : less than 900ppm



Fig.2 Connectors

	IDENTIFICATION
A	Inlet hose
B	Outlet hose
C	Inlet valve
D	Outlet valve
E	Depressurization hose
F	Drain hose
G	Tank cap
L	Name plate
M	Water valve
N	Floor sink

Fig.1 Equipment Identification

### 2.6 REGENERATION CYCLE

PPM	200	300	400	500	600
LITRES	1050	700	525	420	350
CYCLE	10.5 days	7days	5 days	4 days	3.5 days

※ The regeneration cycle standard is based on 100 liters of use per day.

## 2.7 SPECIFICATIONS

Model	Weight [kg]	Resin [l]	Salt [kg]	Dimension
				L X W X H [ mm ]
LT5	5	3.5	0.5	190 X 255 X 300

## 3. INSTALLATION

### 3.1 PACKAGING

- Before installation, check if the equipment has not been damaged by transportation and it is normal.
- To maintain hygienic safety, equipment must be stored in sealed packaging before installation.
- If user is not sure about damage, contact the seller.

### 3.2 INSTALLATION LOCATION AND WATER PRESSURE

- A temperature of the location is recommended as 4°C to 35°C.
- Water pressure must not be less than 0.1Mpa(1bar) or exceed 0.8Mpa(8bar).  
(A minimum of 3 to 4 bar is recommended)
- If the water pressure is above 8 bar, it is recommended to install a pressure adapter.

### 3.3 HOW TO INSTALL AT OPTIMA



1



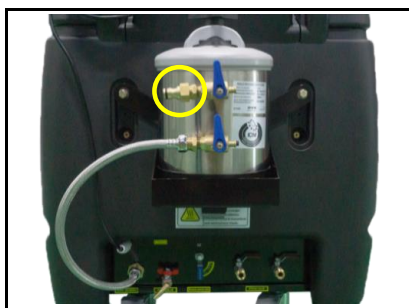
2



3



4



5



6

- 1) Separate both handle caps of OPTIMA using a screwdriver.
- 2) Tighten the shelf bracket bolts using a 14mm spanner.
- 3) Separate the front part of the water inlet nipple installed at OPTIMA by loosening counterclockwise.
- 4) Install the softener on the shelf.
- 5) Connect the front part of nipple(**yellow circle**) to the softener Inlet valve, and connect the Outlet hose to the softener Outlet valve and OPTIMA feed water Inlet.
- 6) Hang the band on both sides of the shelf.

### 3.4 INLET AND OUTLET HOSE CONNECTIONS

- Please refer to the manual before connecting to the equipment.
- When connecting equipment, use hoses, valves and parts that comply with specifications.
- The use of product that does not comply with the specifications is prohibited as it may damage the quality of the treated water and the water quality of the e
- Connect the Inlet hose(Fig.1, A) and the Outlet hose(Fig.1, B) to the connector(Fig.2) of the softener.

### 3.5 DRAIN HOSE CONNECTION

- The Drain hose is used to regenerate the softener.
- Wastewater from regeneration flows into the Floor sink through the Drain hose.(Fig. 1, F)

### 3.6 RINSING THE RESIN

- Place the Outlet hose(Fig.3, B) on the Floor sink.(Fig.3, N)  
**(When rinsing the resin, do not connect the outlet hose to the OPTIMA.)**
- Turn the Inlet and Outlet valve levers(Fig.3, C-D) to the left.
- Open the Water valve(Fig.3, M) to let water in.
- Let water flow for about 40 minutes.
- Close the Water valve(Fig.3, M) and connect Outlet hose(Fig.3, B) to OPTIMA.

#### ※ Reference

- All hoses must not be dented or contracted.
- The inner diameter of the Inlet hose(Fig. 1, A) is at least 7mm.
- The user must install the Water valve(Fig. 1, M) between the Inlet hose and the softener to shut off the water if it is necessary.
- Do not immerse the Drain hose in the Floor sink.(Fig.1, N)

※ **Before connecting Outlet hose to the water inlet nipple of OPTIMA, be sure to rinse the resin. Check the softener regeneration cycle and use it after regenerating it referring to INDEX 4.**

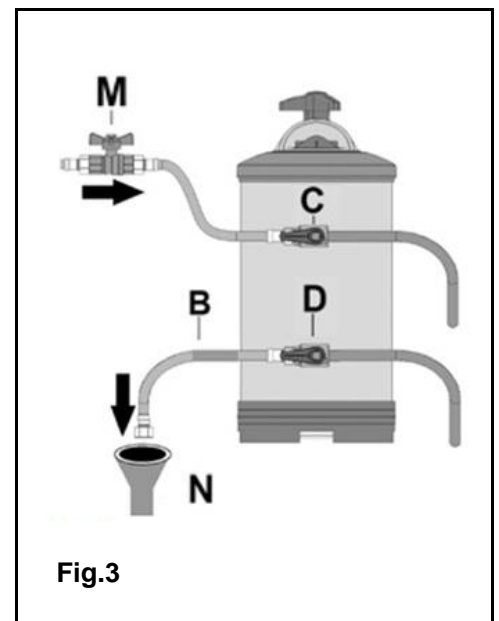


Fig.3 Rinsing Resin



## 4. ION RESIN REGENERATION METHOD

### 1) DEPRESSURIZATION (Fig.4)

- Put the Depressurization hose in a bucket. (If you don't have a bucket, be sure to clear the area)
- Turn the Inlet and Outlet valve levers to the right and wait for depressurization.
- Separate the cap and add 0.5Kg of salt(NaCl), tighten the cap.

※ Do not turn the Inlet and Outlet valves to the left during depressurization.

### 2) RINSING RESIN (Fig.5)

- Turn the Inlet valve lever to the left.
- Open the Water valve to let water in.
- Flow the brine until clean water comes out of the Drain hose. (About 40 minutes)

※ Do not turn the Outlet valve to the left during regenerating the resin.

### 3) USE OF SOFTENER (Fig.6)

- After regeneration is complete, connect the Outlet hose to the OPTIMA.
- After connecting the Outlet hose, turn the Outlet lever to the left and use the softener.

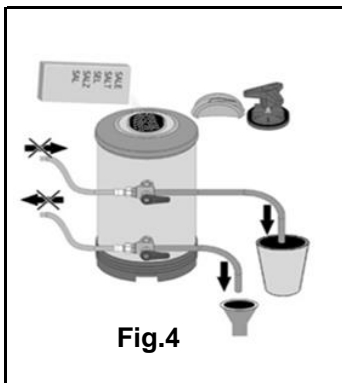


Fig.4 DEPRESSURIZATION

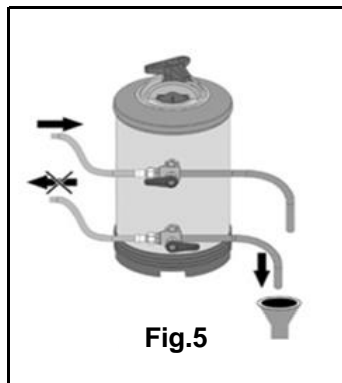


Fig.5 RINSING RESIN

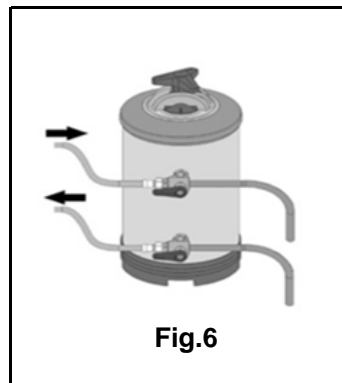


Fig.6 USE SOFTENER

※ Clean around the cap and on the softener to ensure no salt residue remains.

※ Manufacturer and distributor are not responsible for tank corrosion caused by not following the instructions.

※ Do not supply water to the OPTIMA connected to the softener during regeneration. (It is recommended to regenerate after separating the Outlet hose)

## 5. MAINTENANCE

### 5.1 REPLACEMENT OF RESIN

- The lifespan of the resin is about 5-7 years.  
The lifespan may change depending on feed water characteristics and the amount of soft water.
- After the lifespan, the user has to decide whether to replace the resin or to purchase softener itself.
- To replace the resin, you must separate the softener from OPTIMA and replace it at a proper place.

### SOFTENER SEPARATION PROCESS

- 1) Close the Water valve.
- 2) Place the Depressurization hose and Drain hose into the bucket.
- 3) Turn the softener Inlet and Outlet valve levers to the right.
- 4) Wait for a few seconds during the depressurization.
- 5) Separate the Inlet and Outlet hoses from the connectors when water is not coming out from the Depressurization hose.
- 6) Open the cap and replace the resin. (Before inserting new resin, clean the inside of the softener)
- 7) Close the cap and return the softener to its original position.
- 8) Connect the Inlet hose to the connector.
- 9) Rinse the resin as described in INDEX 4. (Ion Resin Regeneration Method)

※ **After replacing the resin, clean the cap and the top of the softener to make sure no resin residue remains.**

### 5.2 RESIN PRESERVATION

- It is prohibited to use the softener being more than 12 months.
- If the softener is not used less than 12 months, the resin must be rinsed and regenerated before using the equipment.

## **6. IMPROPER USE**

- The equipment must not be used for any other purpose and must not be modified or tampered with in any way.
- Uses other than specified in the manual are improper and dangerous.
- Manufacturer and distributor are not responsible for damage from improper, mistaken or unreasonable use of the equipment.
- It is prohibited to supply any liquid other than clean tap water to the equipment.
- It is prohibited to put substances other than salt(NaCl) into the softener.
- Keep the softener upright during using or regeneration.

## **7. EQUIPMENT DISPOSAL**

- The softener is made of non-hazardous materials such as compound, stainless steel and must be disposed by the norms.
- Do not dump the resin to the sewer.
- Resin is classified as non-hazardous waste and must be disposed accordingly. (EU code CER 190905)

