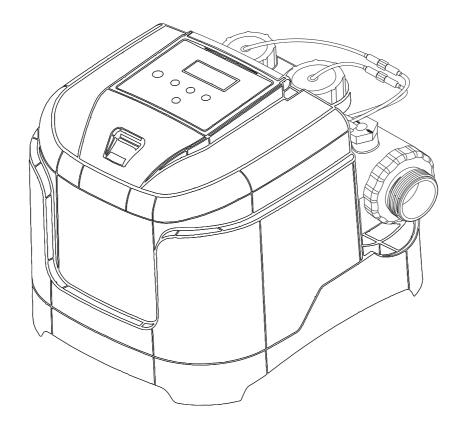


## POOL CLEAR SALTWATER SYSTEM SKU: 90145

E.C.O. (Electrocatalytic Oxidation) for up to 15,000-Gallon Pools



# INSTALLATION AND USER'S GUIDE

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.



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### **IMPORTANT SAFETY INSTRUCTIONS**

This guide provides instructions for installing and using the Pool Clear Salt Water System. For inquiries about the equipment, please contact XtremepowerUS.

This guide contains important information about safely installing and operating this product. After installation, make sure to share this information with the owner/operator or leave it with them for their reference.

#### Legends and Symbols

When encountering the safety-alert symbol on the equipment or within this manual, pay attention to the following signal words and remain vigilant about the potential for personal injury.



**DANGER:** Ignoring these hazards can result in death, severe personal injury, or significant property damage.

**WARNING:** Indicates potential hazards that can result in severe personal injury, WARNING death, or significant property damage. Ignoring these warnings presents a real danger.

CAUTION: Indicates potential hazards that can result in minor or moderate personal injury, property damage, or actions that are unpredictable and unsafe. Ignoring these cautions presents a potential hazard.

**NOTICE:** This label indicates important special instructions that are not directly  $\bigcirc$ NOTE related to hazards.

#### **USE OF NON-XTREMEPOWERUS REPLACEMENT PARTS VOIDS WARRANTY**

**ATTENTION INSTALLER:** This manual contains vital information regarding the installation, operation, and safe use of this product. It is essential to provide this manual to the end user of the product. Failure to read and follow all instructions could lead to severe injuries.

**ADANGER**) Failure to comply with all instructions and warnings may lead to severe bodily injury or even death. For optimal safety and functionality, it is advisable to have the product installed and serviced by a certified service professional. Prior to using this product, installers, operators, and owners must carefully review these warnings and all instructions provided in the owner's manual. It is essential to leave these warnings and the owner's manual with the owner for their reference and safety.

**WARNING** For safety reasons, children should not be allowed to use this product.

Packing materials and plastic bags are not toys. Keep them away from children to prevent the risk of suffocation.

### 

 Risk of Electric Shock: Do not bury the electrical cord or place it where it can be damaged. Always use a grounded type receptacle equipped with a ground-fault circuit interrupter (GFCI). Do not use the unit with a damaged cell housing or if improperly assembled. Ensure the GFCI functions correctly by testing it; if it fails or if it trips without the test button being pressed, discontinue use and seek professional repair. Failure to comply may result in severe injury or death.

#### 

- Outdoor Use Only: This product is designed exclusively for outdoor use.
- Supervision Required: Never allow children to use this product unsupervised. Children and those with disabilities must be closely monitored to prevent injury.
- Assembly and Disassembly: These tasks should only be performed by adults to prevent accidents.
- Electric Shock Prevention: Always disconnect the product from the electrical outlet before cleaning, servicing, or making adjustments. Do not replace the supply cord as this could lead to electric shock; if damaged, replace the appliance. Avoid using extension cords or adapters and ensure a properly located outlet is used.

#### 

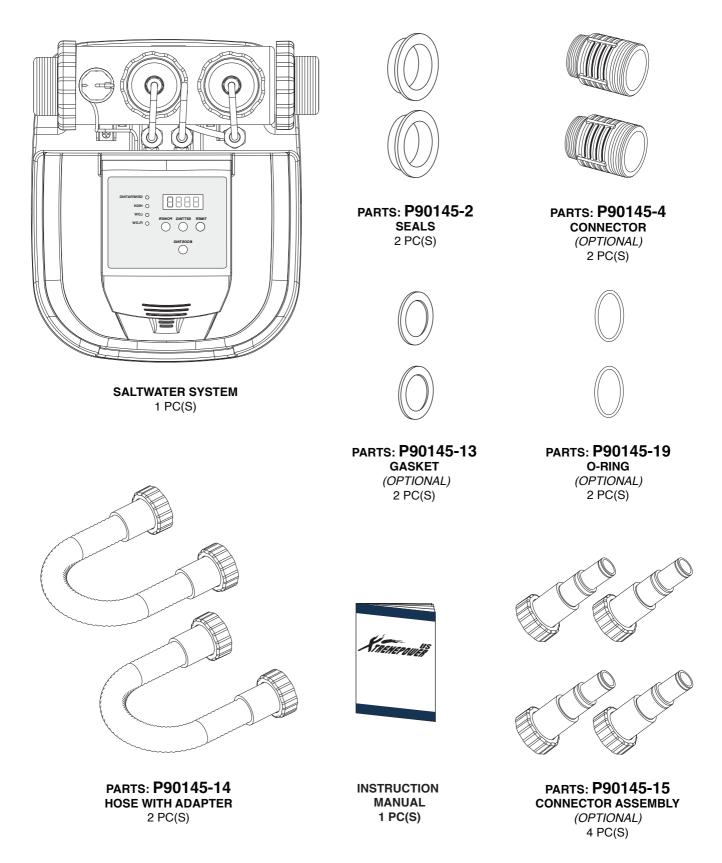
- Storable Pools Only: Use this product with storable pools, not permanently-installed pools. The pool must be installed no closer than 6 feet (1.8 m) from any electrical outlet, with portable appliances kept at least 5 feet (1.5 m) away to reduce the risk of electric shock.
- Proper Installation and Use: Incorrect installation or use could lead to reduced product efficiency and safety hazards.

#### **NOTE**

These guidelines address common risks and do not cover all potential dangers. Always exercise
caution and use good judgment when engaging in water activities. For use with portable
above-ground pools only.

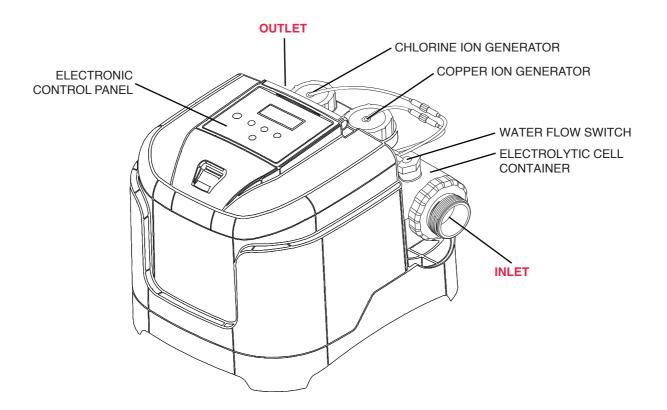
### **PRODUCT OVERVIEW**

### **OVERVIEW (PRODUCT INFORMATION)** PACKAGING CONTENTS



### **PRODUCT OVERVIEW**

#### **PRODUCT INTRODUCTION**



#### Pool Clear SaltWater System

- This product is designed for above-ground pools to provide a clean and comfortable swimming environment by effectively treating the water.
- The system utilizes common salt (sodium chloride), composed of sodium and chloride elements. During the initial setup, a precise amount of salt is dissolved in the pool water, creating a mildly salty solution. As pool water circulates through the Saltwater System's electrolytic cell, chlorine is produced. This chlorine immediately begins working to neutralize bacteria and break down organic matter from swimmers.

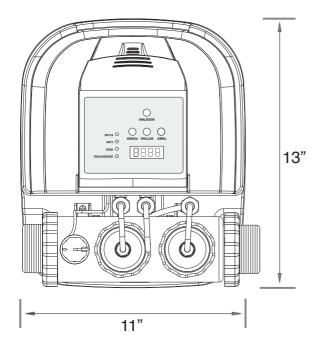
#### E.C.O. (Electrocatalytic Oxidation)

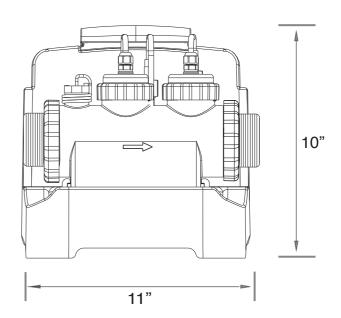
 Electrocatalytic Oxidation, a component of Advanced Oxidation Processes (AOPs), is initiated when a direct current is applied to the system's electrodes. This generates hydroxyl radicals, powerful agents that break down organic contaminants. The presence of hydroxyl radicals, along with chlorine, creates an efficient and secure method for purifying pool water.

#### **SPECIFICATION**

TECHNOLOGY	E.C.O (ELECTROCATALYTIC OXIDATION)
	0-0.5 PARTS PER MILLION (PPM); REPLACE IF GAP > 0.39"
SUITABLE POOL TYPE	ABOVE-GROUND POOLS
SUITABLE POOL CAPACITY	UP TO 15,000 GALLONS
INPUT VOLTAGE	115V / 230V (DUAL VOLTAGE CAPABILTY)
OUTPUT VOLTAGE	ASV
ELECTRIC CURRENT	0.5A / 0.25A
POWER CONSUMPTION	60W
MAXIMUM CHLORINE OUTPUT	0.18OZ / HR
POWER CORD	6FT
MAINTENANCE	EVERY 3MONTHS
SELF-CLEANING	EVERY 2HRS
FUNCTION	WATER FLOW SENSING

#### DIMENSIONS





### INSTALLATION

### INSTALLATION

#### 

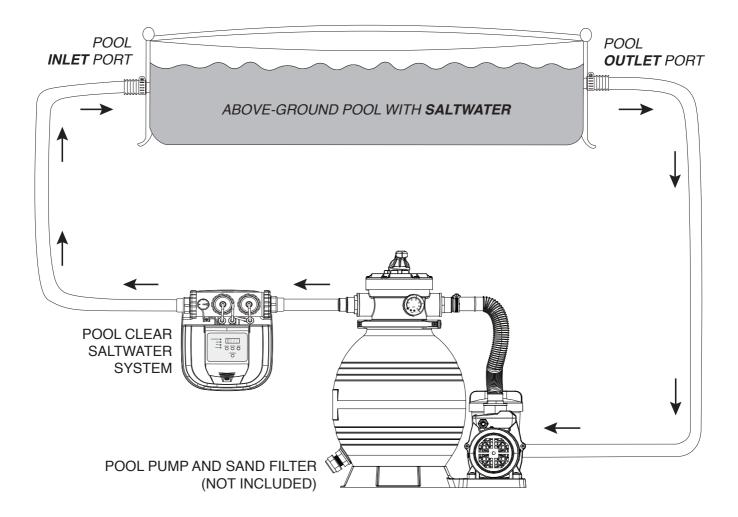
- Install the Saltwater System as the final component in the water return line to the pool to protect the titanium plates.
- Ensure a separate filter pump with a flow rate between 700 to 3000 GPH (2650 to 11,355 LPH) for effective operation.

### **INSTALLATION INSTRUCTIONS**

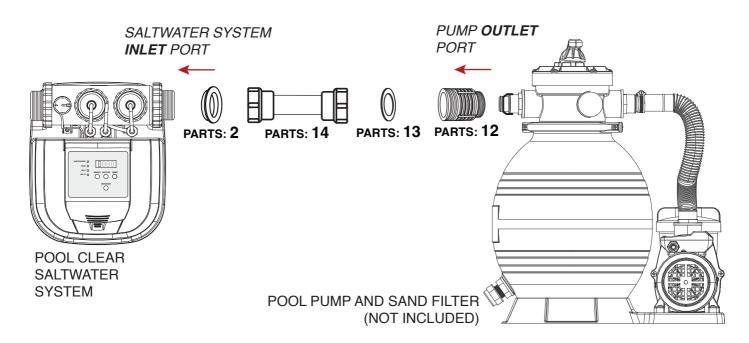
- **Pool Preparation:** Assemble a new pool and filter pump, or shut off the existing setup.
- **Positioning:** Position the Saltwater System downstream of the pump and filter (see Figure A).
- **Connections:** Connect the system inlet to the pump outlet using appropriate hoses and adapters, depending on the pump and pool connections (see Figure B).
- Secure Connections: Tighten all connections securely to prevent leaks.
- **Testing:** Test the system to ensure proper function before regular use.

### **INSTALLATION**

#### Figure A Above-Ground Swimming Pool Equipment Layout



#### Figure B Water Intake Hose Connection



### INSTALLATION

#### Figure C Water Return Hose Connection

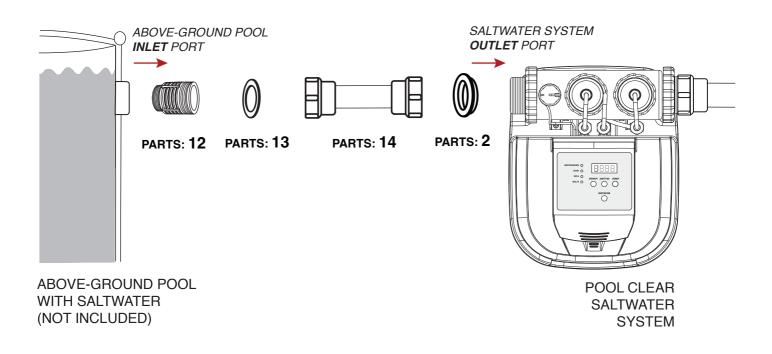
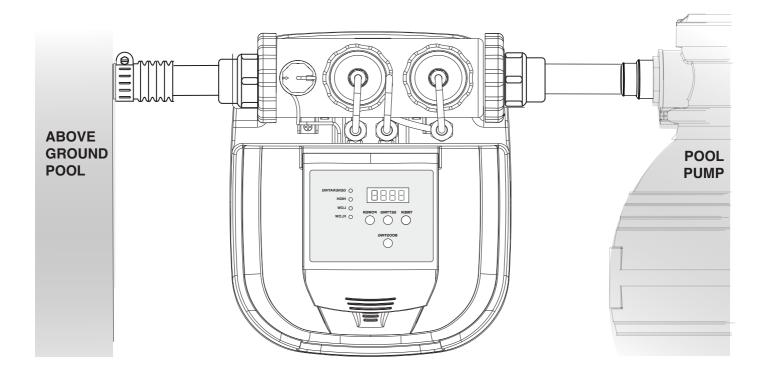
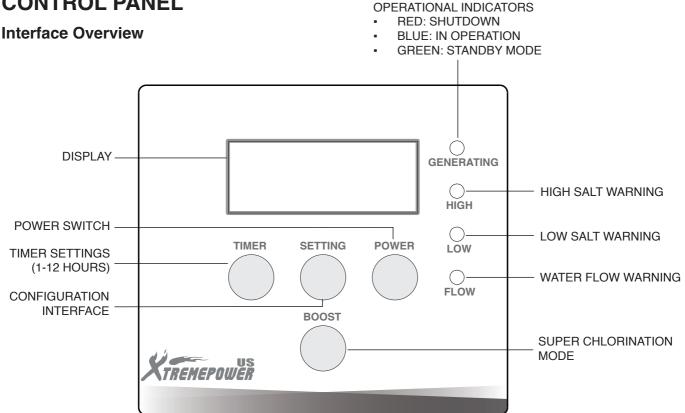


Figure D Water Hose Connection Completed



### **OPERATION**

### OPERATION CONTROL PANEL



#### **Display Guide**



Daily Operation Time:

Set by powering on or pressing SETTING. Displays as a daily cycle (e.g., "3" for 3 hours per day from startup). Adjust according to pool size; see section "Pool Size and Recommended Operation Time."



Remaining Cycle Time:

Displays the time left in the current cycle (e.g., "02:32" for 2 hours and 32 minutes remaining).



Super Chlorination Mode (S):

Enhanced chlorination mode, where the "-3" setting increases the normal chlorination duration to 24 times (3 multiplied by 8) the standard rate.



Electrolysis Current (A1:15):

Indicates the current flow for chlorination, typically yielding 2.6 times the chlorination rate relative to the current shown.

### **OPERATION**

### **Function Description**

#### Setting Mode:

- Activate: Long press SETTING until display blinks.
- Adjust: Use TIME to set duration based on pool size.

#### **Chlorine Production Mode:**

- Start: Press POWER after setting the time.
- Indicators: Blue light during operation, green light in hibernation.
- **Resume**: Automatically restarts at the same time the next day.

#### Super Chlorine Mode:

- Activate: Press BOOST during normal operation for 8x extended chlorination.
- **Note**: Ensure the pump and filtration system are active.

#### Self-Cleaning Mode:

• Automatic: Cleans every 2 hours with no user input required.

#### **Power-Off Memory:**

• **Resume**: Automatically continues with previous settings after power loss.

#### Water Flow Sensing:

• **Monitor**: Halts operation if no water is detected, then resumes without resetting the timer once flow is restored.

#### Query Mode:

• Access: Long press TIME to view current settings. Press again to display the countdown. Exit with SETTING.

#### **ECO Copper Ion Generator:**

• **Maintenance:** Regularly check copper ion concentration (0-0.5 mg/L) and gap size. Replace the generator if the gap exceeds approximately 0.4 inches.

### **OPERATION**

### Salt Concentration and Pool Settings

#### Salt Range:

- Optimal Concentration: 2500-3500 PPM, ideal at 3000 PPM.
- Device Operational Range: 700-4000 PPM.
- Low Salt Risks: Reduces system efficiency and chlorine production.
- High Salt Risks: Can make water salty, damage power supply, and corrode metal fixtures. Salt loss only occurs with water removal, not evaporation.
- Required Salt for Pools:

POOL VOLUME	INITIAL SALT	ADD SALT ON LOW SALT ALARM	
GALLON	LBS	LBS	
2000	50	10	
4000	100	25	
6000	150	40	

#### **Copper Ion Concentration**

• Range: 0-0.5 mg/L. Confirm with copper ion test strips

### **Pool Size and Recommended Operation Time**

POOL VOLUME	RECOMMENDED OPERATING TIME BASED ON ENVIRONMENTAL CONDITION			
GALLON	50°F - 66°F	68°F - 82°F	84°F - 97°F	
2000	2 HOURS	3 HOURS	4 HOURS	
4000	4 HOURS	5 HOURS	6 HOURS	
6000	6 HOURS	7 HOURS	8 HOURS	

### TROUBLESHOOTING

### TROUBLESHOOTING

### Salt Concentration and Pool Settings

#### Water Flow Protection: FLOW Red Light

- Cause: Pump stopped or valves closed
- Solution: Start the circulation pump, check for blockages, and open valves.
- Cause: Faulty flow switch or loose connections
- **Solution**: Replace the flow switch if the pump is on and the switch is closed.

#### High Salt Alert: HIGH Blue Light, GENERATING Bright Blue

- Cause: Excessive salt concentration
- **Solution**: Dilute by partially draining and refilling with fresh water.

#### **Overcurrent Protection: HIGH Red Light, GENERATING Bright Green**

- Cause: High salt concentration or generator blockage
- Solution: Clean the generator, check the salt level, and restart the system.

#### Low Salt Alert: LOW Blue Light

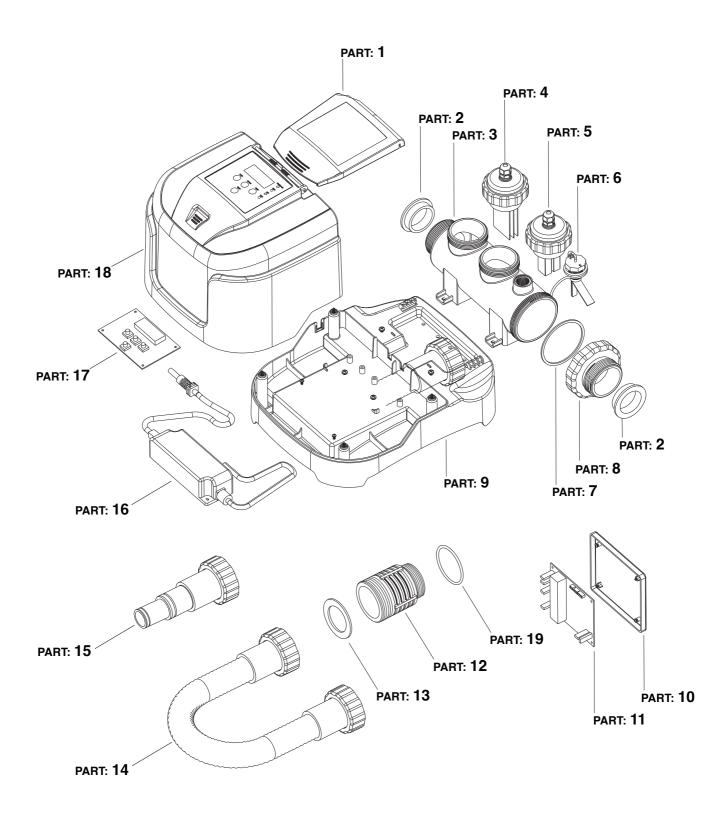
- Cause: Salt level below 700 PPM
- Solution: Add salt to the pool.

#### Low Current: LOW Red Light

- Cause: Extremely low salt level or circuit break
- **Solution**: Check the generator and salt level. Replace the generator if necessary, especially if it's beyond its expected lifespan.

### **REPLACEMENT PARTS**

### REPLACEMENT PARTS PARTS DIAGRAM



### **REPLACEMENT PARTS**

### REPLACEMENT PARTS PARTS LIST

ITEM	REFERENCE #	DESCRIPTION	QTY
90145-1	41025044	CONTROL BOX COVER	1
90145-2	5432055080	SEALS Φ 56*Φ 47*14MM	2
90145-3	647019607	ELECTROLYTIC CELL CONTAINER	1
90145-4	647019672000	CHLORINE ION GENERATOR	1
90145-5	647019671000	COPPER ION GENERATOR	1
90145-6	576024000	WATER FLOW SWITCH	1
90145-7	5432098080	GASKET	1
90145-8	647019608	CONTAINER CAP	1
90145-9	647019602	BASE	1
90145-10	647019603	CONTROL PLATE BRACKET	1
90145-11	5028322000	CIRCUIT BOARD	1
90145-12	647279510001	CONNECTOR	2
90145-13	65432044080	GASKET 54.8* 36.8*2.4MM	2
90145-14	647229003001	1 1/2"x 5.4FT HOSE WITH ADAPTER	2
90145-15	91120001	CONNECTOR ASSEMBLY	4
90145-16	5760224000	AC/DC ADAPTER	1
90145-17	502832100	WIRING HARNESS BOARD	1
90145-18	647019601	CONTROL PANEL COVER	1
90145-19	5431021080	O-RING	2

### DISCLAIMER PLEASE READ THE FOLLOWING CAREFULLY

The manufacturer and/or distributor have provided the parts list and assembly diagram in this manual for reference purposes only. They do not make any representation or warranty to the buyer that they are qualified to make repairs to the product or replace any parts of the product. In fact, the manufacturer and/or distributor expressly state that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer.

The buyer assumes all risk and liability arising from their repairs to the original product or replacement parts or arising from their installation of replacement parts. It is strongly advised that qualified professionals handle any repairs or replacements to ensure safety and proper functioning of the product. Improper installation and operation may result in injury, property damage, or voiding of warranty. The manufacturer and/or distributor shall not be held responsible for any accidents, damages, or malfunctions resulting from the buyer's installation and operation of the product. It is essential to follow all safety guidelines and recommendations provided in this manual and to seek professional assistance if unsure about the installation or operation procedures.

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