

NEWTRY 11KW

NEWTRY 11KW SPA Heater Instruction Manual

Model: 11KW

INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your NEWTRY 11KW SPA Heater. Please read this manual thoroughly before installation and use, and keep it for future reference. This heater is designed for use with spas, hot tubs, and above-ground pools, providing consistent water temperature for enhanced comfort.

SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always disconnect power before performing any service or maintenance.
- Installation and electrical wiring must be performed by a qualified, licensed electrician in accordance with all local and national electrical codes.
- Ensure proper grounding to prevent electrical shock.
- Do not operate the heater if the water flow is insufficient or if the heater is not properly filled with water.
- Keep children and unauthorized persons away from the heater during operation.
- Do not use in salt water or chlorinated pools as this may cause corrosion to the heating element.

PRODUCT OVERVIEW

Components

- Main Heater Unit with Digital Display
- Integrated 316 Stainless Steel Heating Tubes
- Power Switch

- Temperature Adjustment Buttons (SET, Up, Down)
- Water Inlet and Outlet Ports (1.5" PVC compatible)

Key Features

- **LCD Touchscreen:** Digital display shows real-time water temperature and allows for precise temperature setting. Temperature unit can be toggled between Celsius and Fahrenheit.
- **Auto Heating:** Intelligently maintains preset temperature by pausing when reached and restarting if water cools, ensuring comfort and energy efficiency.
- **Durable Heating Elements:** Features 316 stainless steel heating tubes for fast response to temperature changes and long-lasting performance.
- **Standard Plumbing Compatibility:** Designed for use with standard SCH40 1.5" PVC pipes for plumbing connections.
- **Hardwire Connection:** For safety compliance with high-power operation, the heater requires direct wiring to a dedicated 2P GFCI breaker.



Figure 1: Front view of the NEWTRON 11KW SPA Heater, showing the digital display, power switch, and plumbing connections.

Built in 316 Heating Element



QUICK HEATING



HIGH-TEMP
PERFORMANCE



316 STAINLESS
STEEL

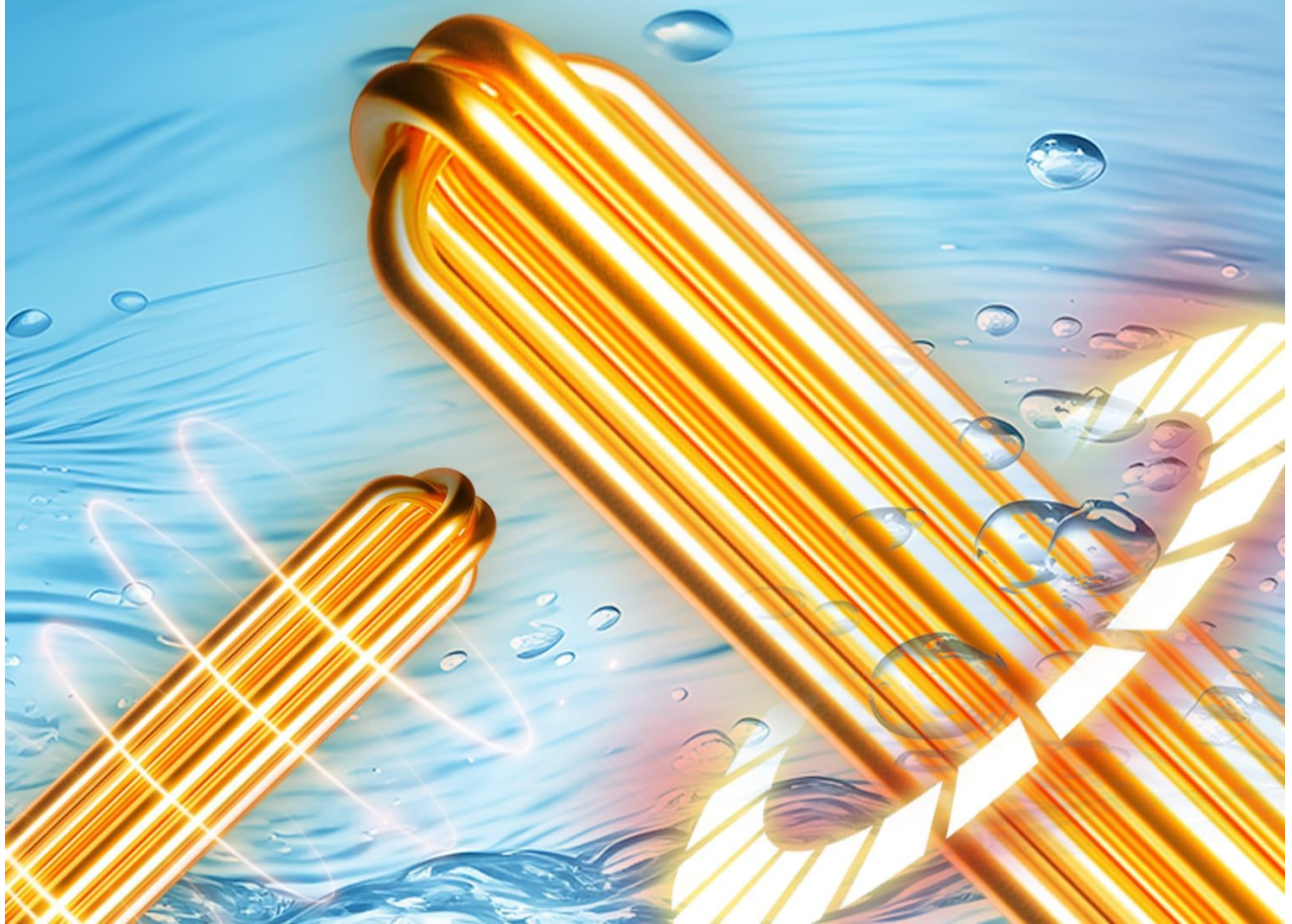


Figure 2: Internal view highlighting the robust 316 stainless steel heating elements, designed for quick and efficient heating.

SETUP AND INSTALLATION

Plumbing Connection

The heater is fitted with 1.5" PVC fittings. You must use standard 1.5" Schedule 40 PVC pipe for all plumbing connections. Using smaller pipe sizes may result in insufficient water flow, which can affect heater performance and potentially cause damage.

1. Connect the water inlet and outlet ports of the heater to your pool or spa's circulation system.
2. Ensure that the circulation pump is installed before the heater and provides adequate flow (minimum 1HP recommended).
3. Use appropriate PVC cement and primer for secure, leak-free connections.

Used with Circulation Pump

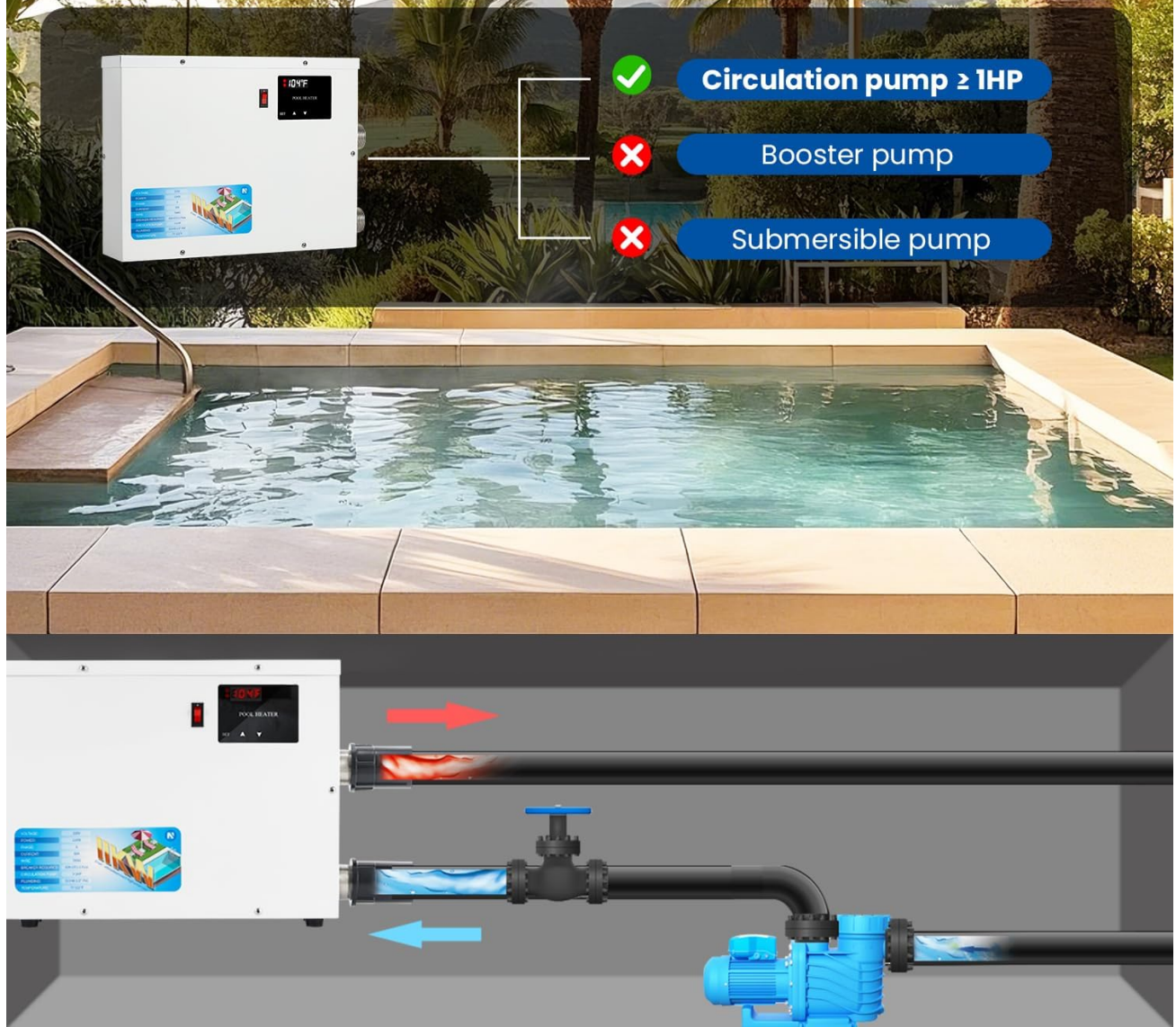
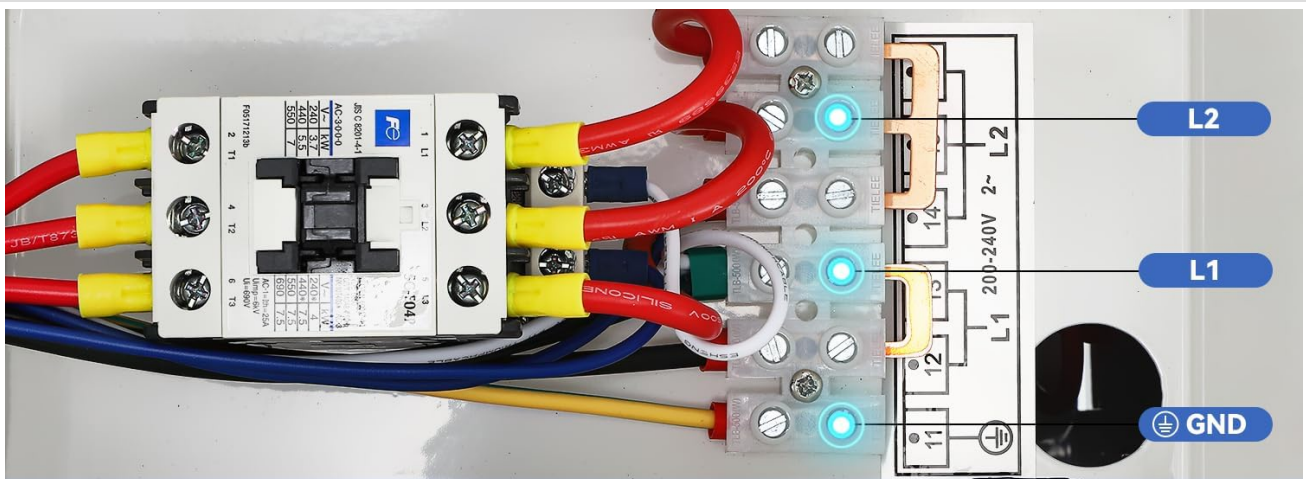


Figure 3: Illustration of the heater's plumbing connections, emphasizing the need for a circulation pump ($\geq 1\text{HP}$) and 1.5" SCH40 PVC piping.

Electrical Connection

IMPORTANT: Electrical installation must be performed by a licensed electrician. The heater operates on 220V and requires a dedicated 2P GFCI breaker.

1. Ensure the main power supply to the installation area is turned off at the breaker.
2. Connect the heater directly to a dedicated 2P GFCI breaker. Refer to the specifications section for the required breaker amperage and wire gauge (7AWG for 11KW model).
3. The connection requires one ground wire and two live wires (L1 and L2) for 220V operation.
4. Secure all wiring connections firmly within the heater's terminal block and the breaker panel.
5. After wiring, close all covers and ensure they are properly sealed.



Circuit Connection

The spa heater operates on 220V.

In North America (110V standard), it requires one ground wire and two live wires.

A **2P GFCI** breaker is required.

Figure 4: Detailed diagram illustrating the electrical circuit connection, showing the required L1, L2, and Ground (GND) connections to the breaker.

Installation Video Guide

Video 1: An official product video demonstrating the working principle of the SPA heater, including visual guidance on plumbing and electrical circuit connections. This video provides a helpful overview of the installation process.

OPERATING INSTRUCTIONS

Digital Display and Temperature Control

The NEWTRY SPA heater features an intuitive digital display for easy temperature management.

1. **Power On/Off:** Use the red power switch on the front panel to turn the heater on or off.
2. **Real-time Temperature:** The LCD screen displays the current water temperature.
3. **Setting Temperature:** Press the 'SET' button to enter temperature setting mode. Use the 'Up' (▲) and 'Down' (▼) arrows to adjust the desired temperature. Press 'SET' again to confirm.
4. **Temperature Unit Toggle:** Press and hold the 'SET' button to switch the temperature unit between Celsius

(°C) and Fahrenheit (°F).

5. **Indicators:** The display includes a Flow Indicator and a Heating Indicator. The heater operates correctly only when both indicators are ON.



Figure 5: The intuitive digital interface of the heater, showing the temperature display and control buttons for precision control and unit toggling.

Automatic Heating Function

Once the desired temperature is set, the heater will automatically maintain it. It will pause heating when the water reaches the preset temperature and restart only if the water temperature drops below the set point. This intelligent control ensures consistent comfort and optimizes energy consumption.

AUTO Cycled around pre-set temperatures Circulation Heating



Figure 6: A graphical representation of the auto-heating function, demonstrating how the heater maintains a constant temperature with smart fluctuation control ($\pm 1^\circ\text{F}$).

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your SPA heater.

- **Inspect Plumbing:** Periodically check all plumbing connections for leaks or signs of wear. Tighten connections as needed.
- **Clean Filters:** Ensure your pool/spa filter system is clean and functioning correctly to prevent debris from entering the heater.
- **Electrical Inspection:** Annually, have a qualified electrician inspect the electrical connections and breaker for any signs of corrosion or loose wiring.
- **Winterization:** If you live in an area with freezing temperatures, ensure the heater is properly drained and winterized according to standard pool/spa winterization procedures to prevent freeze damage.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter. For problems not listed here, or if solutions do not resolve the issue, contact qualified service personnel.

Problem	Possible Cause	Solution
Heater not turning on	No power, tripped breaker, faulty wiring.	Check power supply, reset GFCI breaker. Verify wiring connections (consult electrician).
Water not heating	Insufficient water flow, incorrect temperature setting, heating element issue.	Ensure circulation pump is running and providing adequate flow. Check and adjust temperature setting. Verify both flow and heating indicators are ON.
Error code on display	Specific internal fault.	Refer to the specific error code in a more detailed technical manual (if available) or contact customer support.
Loud noise from heater	Air in system, pump cavitation.	Bleed air from the plumbing system. Ensure proper water level and pump operation.

SPECIFICATIONS

Technical specifications for the NEWTRY 11KW SPA Heater:

Parameter	Value (11KW Model)
Power	11KW
Voltage	220V
Phase	2
Current	50A
Breaker Required	60A (2P GFCI)
Wire Gauge	7AWG
Plumbing Size	SCH40 1.5" PVC
Circulation Pump	≥1HP
Suggested Capacity	1300 Gallons
Product Dimensions	10 x 15 x 10 inches
Item Weight	19.76 pounds






			
POWER	5.5KW	9KW	11KW
VOLTAGE	220V	220V	220V
PHASE	2	2	2
CURRENT	25A	41A	50A
BREAKER REQUIRED	40A	50A	60A
WIRE	10AWG	6AWG	6AWG
PLUMBING SIZE	SCH40 1.5" PVC	SCH40 1.5" PVC	SCH40 1.5" PVC
CIRCULATION PUMP	≥1HP	≥1HP	≥1HP
SUGGESTED CAPACITY	700Gals	1000Gals	1300Gals

Figure 7: A comparative table of specifications for different NEWTRY SPA Heater models, including power, voltage, current, breaker requirements, wire gauge, plumbing size, circulation pump recommendations, and suggested capacity.

WARRANTY AND SUPPORT

NEWTRY products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the contact information provided with your purchase or visit the official NEWTRY website. Please have your model number and purchase date ready when contacting support.