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> Mxmoonant SPA Heater, 18KW 220V Swimming Pool Heaters Hot Tub Water Thermostat with Touchscreen for Above Ground Inground Pool, Spa, Bathtub User Manual

Mxmoonant 18KW

Mxmoonant SPA Heater User Manual

MODEL: 18KW | BRAND: MxMOONANT

1. Introduction

Thank you for choosing the Mxmoonant 18KW SPA Heater. This powerful 220V electric heater is designed to efficiently maintain the desired water temperature in your above-ground or in-ground pool, spa, or bathtub. Featuring an automatic circulating heating system and an intuitive touchscreen display, this unit provides reliable and convenient temperature control. Please read this manual thoroughly before installation and operation to ensure safe and optimal performance.

2. Safety Information

WARNING: Electrical installation must be performed by a licensed electrician. Failure to do so may result in electric shock, fire, or other serious injury.

- Always disconnect power to the unit before performing any maintenance or installation.
- Ensure the heater is properly grounded.
- The pool heater must be equipped with a leakage protector.
- Do not operate the heater if the water flow rate is too low or not flowing.
- This product is designed for indoor use only.
- Ensure the pool or spa capacity does not exceed 2000 US gallons for optimal heating performance with the 18KW model.

3. Product Overview

The Mxmoonant SPA Heater is a compact and efficient unit designed for easy integration into your pool or spa system. It features a durable casing, a digital touchscreen for temperature control, and robust internal components.

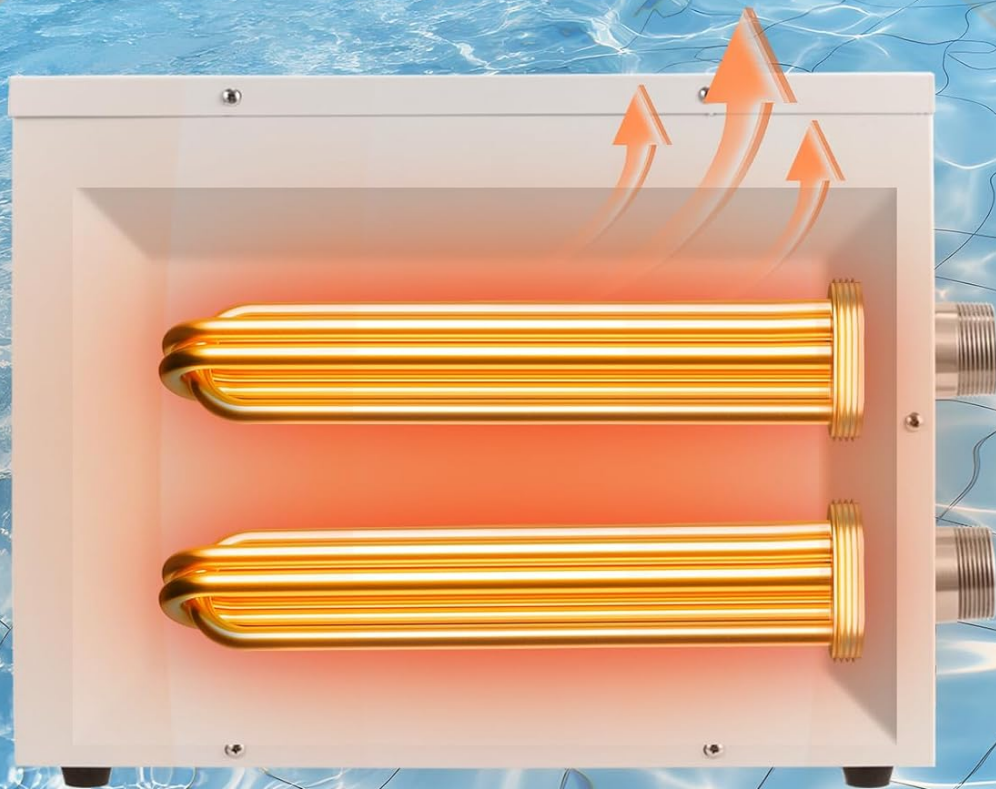


Image: Front view of the Mxmoonant 18KW SPA Heater, showing the digital display and water inlets/outlets.

Key components include:

- **Touchscreen Display:** For setting and monitoring water temperature.
- **304 Stainless Steel Heating Tubes:** Provide efficient and durable heating.
- **Water Inlets/Outlets:** For connection to your plumbing system.

304 STAINLESS STEEL HEATING TUBE



High Efficiency



Quick Heating



Long Lifespan



Energy Saving

Image: Close-up view of the internal 304 stainless steel heating tubes, highlighting their robust construction.

4. Specifications

Refer to the table below for detailed specifications of the Mxmoonant SPA Heater models.

SPECIFICATION

				
Power	9KW	11KW	15KW	18KW
Voltage	220V	220V	220V	220V
Phase	2	2	2	2
Current	41A	50A	68.2A	81A
Breaker Required	50A	60A	90A	110A
Wire	7AWG	7AWG	4AWG	2AWG
Plumbing Size	SCH40 1.5" PVC			
Circulation Pump	≥1HP			
Ideal Capacity	1000Gals	1300Gals	1500Gals	2000Gals

Image: Detailed specification table for various Mxmoonant pool heater models, including power, voltage, current, breaker requirements, wire gauge, plumbing size, circulation pump, and ideal capacity.

Mxmoonant 18KW SPA Heater Specifications

Feature	Value
Brand	Mxmoonant
Special Feature	Digital Display
Color	White
Form Factor	Cabinet
Indoor/Outdoor Usage	Indoor
Product Dimensions	17"D x 2"W x 10"H
Heat Output	18000 Watts (18KW)

Feature	Value
Fuel Type	Electric
Item Weight	20.2 pounds
Item Model Number	18KW
Ideal Capacity	Around 2000 gallons

5. Installation Guide

5.1 Electrical Wiring

The Mxmoonant SPA Heater is a high-powered appliance designed for hardwiring. It requires a 220V electrical supply. For the 18KW model, a 110A breaker is required, and 2AWG wire is recommended. It is crucial to have a licensed electrician handle the installation to ensure safety and proper functionality.

NOTE

Note that this product requires self wiring



WIRING METHOD FOR 110V CIRCUIT

For 110V circuit, you should connect one ground wire and two live wires (L1 & L2)

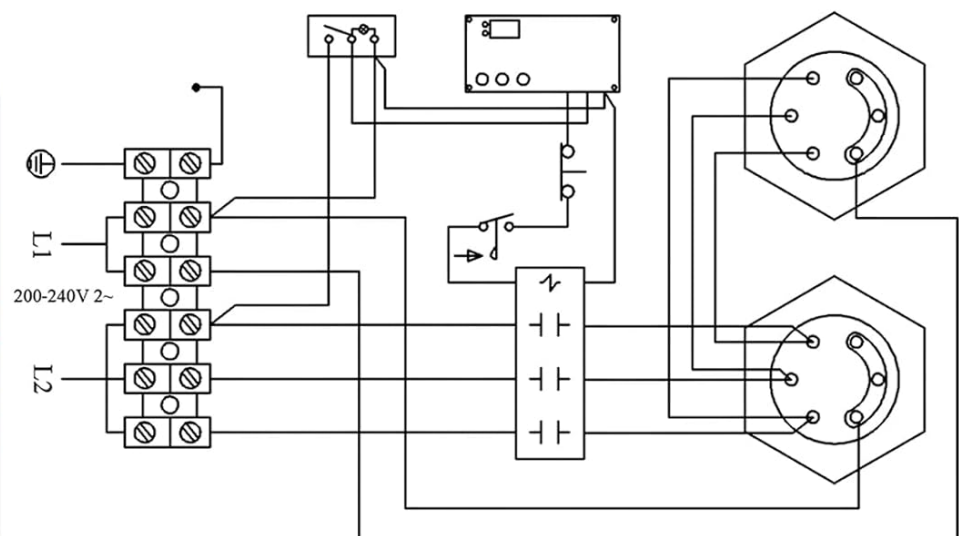
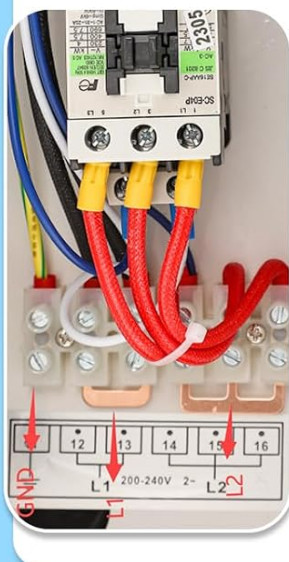


Image: Wiring diagram showing connections for the pool heater, including L1, L2, and ground. Note: The heater must be equipped with a leakage protector.

For a 220V circuit, connect the two live wires (L1 & L2) and a ground wire. Ensure all connections are secure and meet local electrical codes. A leakage protector is mandatory for safe operation.

5.2 Plumbing Installation

Use Schedule 40 standard 1.5-inch PVC pipe for all plumbing connections. Using smaller pipe sizes may result in insufficient water flow, which can prevent the heater from operating correctly.

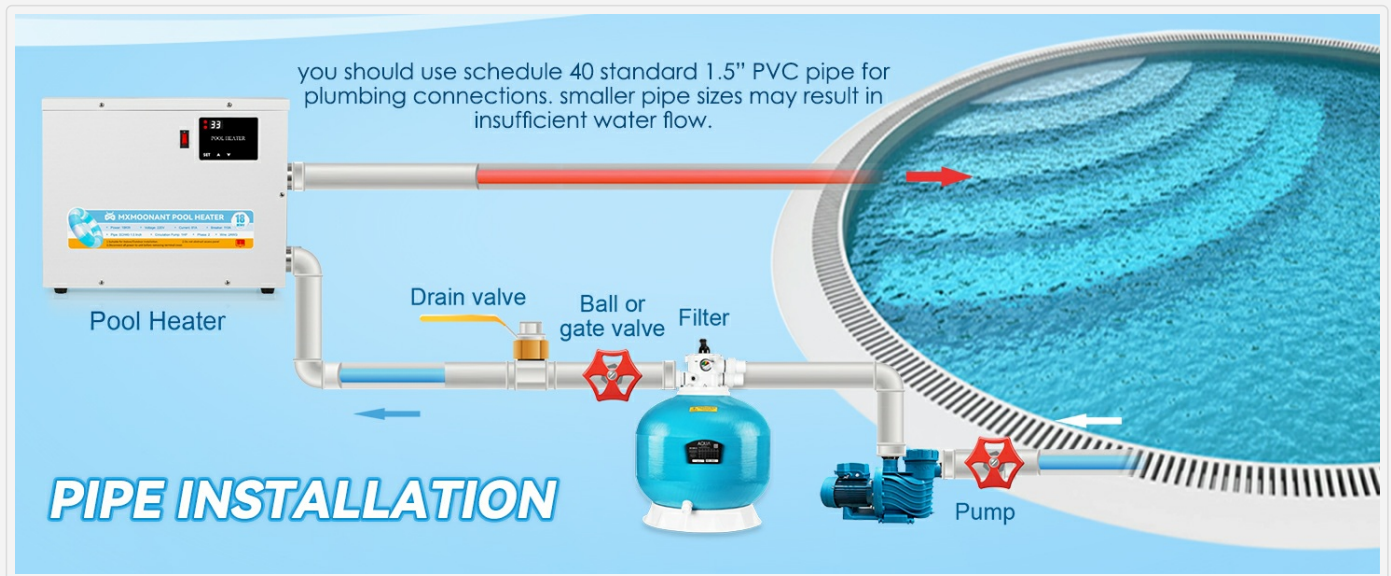


Image: Diagram illustrating the typical pipe installation setup, showing the pool heater connected in line with the filter and pump, including drain and ball/gate valves.

5.3 Circulation Pump Requirements

A circulation pump with a minimum of 1 HP (Horsepower) is required for the heater to function correctly. Ensure your existing pump meets this specification or install a suitable pump.

CONNECT WITH CIRCULATION PUMP

circulation pump $\geq$ 1HP ✓



circulation pump - 1HP



submersible pump
✗



booster pump
✗



$\geq$ 1HP
CIRCULATION PUMP

9kW

11kW

15kW

18kW



Image: Visual representation indicating that a circulation pump of 1 HP or greater is required, showing examples of suitable and unsuitable pump types.

6. Operating Instructions

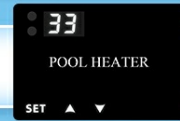
6.1 Initial Startup and Water Flow Check

Once the electrical and plumbing installations are complete, you must turn on the circulation system (pump) first, and then the heater. The heater relies on adequate water flow for safe and proper operation.

PRECAUTIONS AFTER INSTALLATION

once the installation of the circuit and piping is complete, you are required to turn on the circulation system first and then the heater.

if the indicator light of water flow is not lit, it indicates that the water flow rate is too low or not flowing and the pool heater cannot be heated properly.



if the indicator light of water flow is lit, it indicates that the water flow rate is normal and the pool heater will be heated properly. (When the heat indicator light is lit, it means the heater is heating up)

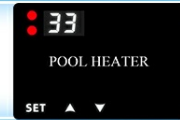


Image: Display showing the water flow indicator. If the indicator light is not lit, water flow is too low. If lit, water flow is normal and the heater can operate.

- If the indicator light for water flow is **not lit**, it means the water flow rate is too low or not flowing, and the pool heater cannot heat properly.
- If the indicator light for water flow is **lit**, it indicates that the water flow rate is normal, and the pool heater will heat properly. When the heat indicator light is lit, it means the heater is actively heating.

6.2 Automatic Circulating Heating

The heater operates on an automatic circulating heating principle. It will cycle on and off based on your preset temperature. When the water temperature reaches or surpasses the preset level, the thermostat will automatically shut off. If the temperature drops below the preset level, the heater will automatically turn on again to maintain the desired temperature.

AUTOMATIC CIRCULATION HEATING

Operating in cycles around preset temperatures

50°C/122°F

25°C/77°F

PROPER TEMPERATURE FOR POOL: 78~86°F / 25~30°C

PROPER TEMPERATURE FOR HOT TUB / SPA: 104°F / 40°C

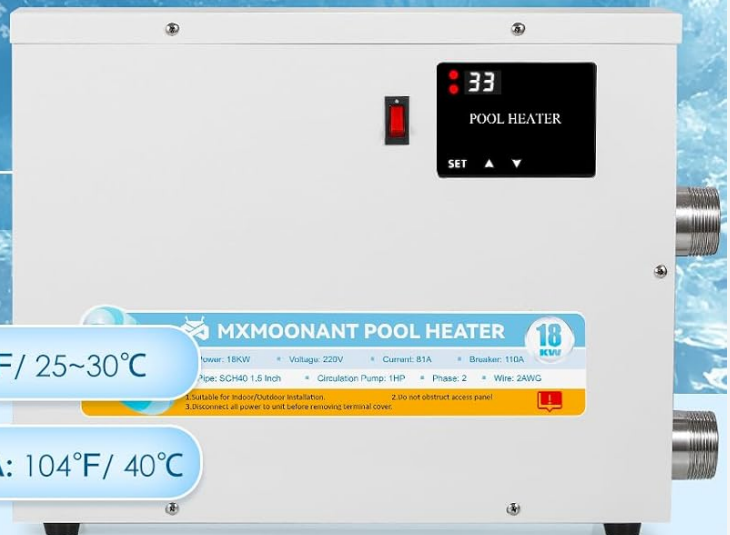


Image: Diagram illustrating the automatic circulation heating process, showing temperature fluctuations around a set point and recommended temperature ranges for pools and hot tubs.

Recommended temperature ranges:

- **For Pools:** 78°F – 86°F (25°C – 30°C)
- **For Hot Tubs/SPAs:** 104°F (40°C)

6.3 Touchscreen Display

The upgraded touchscreen display provides clear visibility and easy control of the heater's settings. You can accurately set and monitor the water temperature directly from the screen.



Image: A hand interacting with the touchscreen display, highlighting its intuitive, user-friendly, and visible interface.

6.4 Estimated Heating Time

The time required to heat your pool or spa depends on several factors, including the volume of water, the desired temperature increase, the heater's power, and the ambient temperature. The table below provides estimated heating times for a 1000-gallon volume to a 41°F temperature increase.

ESTIMATED HEATING TIME FOR EACH POWER

POWER	VOLUME	HEATING TEMPERATURE	ESTIMATED TIME
9KW	1000 Gal	41 °F	3 hours
11KW	1000 Gal	41 °F	2.5 hours
15KW	1000 Gal	41 °F	1.8 hours
18KW	1000 Gal	41 °F	1.5 hours



1. Pool thermostat helps maintain constant temperature without rapid heating like traditional heaters.
2. Use hot water, not cold, in the pool or tub to prevent affecting heating performance.
3. Factors affecting heating time include environmental temperature and pool insulation.

Image: Table showing estimated heating times for different power models (9KW, 11KW, 15KW, 18KW) for a 1000-gallon volume with a 41°F temperature increase.

- Pool thermostats help maintain a constant temperature without rapid heating like traditional heaters.
- Use hot water, not cold, in the pool or tub to prevent affecting heating performance.
- Factors affecting heating time include environmental temperature and pool insulation.

7. Maintenance

Regular maintenance ensures the longevity and efficiency of your Mxmoonant SPA Heater.

- **Inspect Connections:** Periodically check all electrical and plumbing connections for leaks or signs of wear.
- **Clean Filters:** Ensure your pool/spa filter system is clean and functioning properly to maintain adequate water flow.
- **Winterization:** If you live in an area with freezing temperatures, follow proper winterization procedures for your pool/spa system, including draining the heater to prevent freeze damage.
- **Heating Tubes:** The 304 stainless steel heating tubes are designed for durability and efficient heat transfer, requiring minimal maintenance.

8. Troubleshooting

If you encounter issues with your Mxmoonant SPA Heater, refer to the following common problems and solutions:

- **Heater Not Turning On:**

Possible Cause: No power, insufficient water flow, or incorrect wiring.

Solution: Check circuit breaker, ensure circulation pump is running and providing adequate flow (check water flow indicator), verify electrical connections are correct and installed by a licensed electrician.

- **Water Not Heating:**

Possible Cause: Insufficient water flow, heater undersized for pool volume, or extreme ambient temperature.

Solution: Ensure water flow indicator is lit. Verify your pool volume is within the recommended 2000-gallon capacity for the 18KW model. Consider environmental factors affecting heating performance.

- **Inaccurate Temperature Reading:**

Possible Cause: Sensor issue.

Solution: Contact customer support if the display shows inconsistent or incorrect temperatures.

- **Electrical Issues (e.g., tripping breaker):**

Possible Cause: Incorrect wiring, overloaded circuit, or internal fault.

Solution: Immediately disconnect power. This is a high-power appliance; consult a licensed electrician to inspect the

wiring and circuit. Ensure the correct breaker size (110A for 18KW) and wire gauge (2AWG) are used.

For issues not covered here, please contact Mxmoonant customer support.

9. Warranty and Support

Mxmoonant stands behind the quality of its products. For warranty information, technical support, or replacement parts, please visit the official Mxmoonant website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty claims.

Contact Information:

Please refer to the product packaging or the official Mxmoonant website for the most up-to-date contact details.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question