Mxmoonant 4500Psi/30Mpa/300Bar

Mxmoonant 12V 300bar/4500psi/30mpa PCP Portable Air Compressor User Manual

Model: 4500Psi/30Mpa/300Bar

1. Product Overview

The Mxmoonant 12V 300bar/4500psi/30mpa PCP Portable Air Compressor is a compact and efficient high-pressure air pump designed for various applications. It is suitable for filling gas cylinders under 60 cubic inches / 1 liter, commonly used with PCP air rifles, paintball tanks, and small diving cylinders. Its versatility also extends to industrial uses such as firefighting, leak detection, pressure testing, and automotive applications.

This compressor features a lightweight design, making it easy to transport. It operates at a working pressure of 300bar/4500psi/30mpa and delivers an exhaust flow rate of up to 20L/min, powered by a 12V DC source. The unit is oil-free, ensuring clean and hygienic operation without the need for external water cooling. It includes an integrated temperature display for real-time monitoring and an external oil-water separation filter for enhanced performance and simplified maintenance.



Figure 1: The Mxmoonant PCP Portable Air Compressor in a field setting, connected to an air rifle, demonstrating its primary use for PCP and paintball applications.

2. Setup Instructions

2.1 Unpacking and Inspection

- Carefully remove all components from the packaging.
- Inspect the compressor and accessories for any signs of damage. Do not operate if damage is present.
- Ensure all listed components are present: compressor unit, high-pressure hose, power cables (for 12V DC and/or AC adapter if included), and external filter.

2.2 Connecting the High-Pressure Hose

1. Locate the high-pressure output port on the compressor.
2. Connect one end of the high-pressure hose to the compressor's output port, ensuring a secure, leak-free connection.
3. Connect the other end of the hose to the air inlet of your PCP air rifle, paintball tank, or diving cylinder. Use appropriate

adapters if necessary.

2.3 Power Connection

The compressor can be powered by a 12V DC car battery or a 220V/230V AC power source (with an appropriate adapter, not always included).

2.3.1 12V DC Car Battery Connection

1. Ensure the compressor's power switch is in the OFF position.
2. Connect the red power clamp to the positive (+) terminal of the 12V car battery.
3. Connect the black power clamp to the negative (-) terminal of the 12V car battery.
4. Verify connections are secure before proceeding.

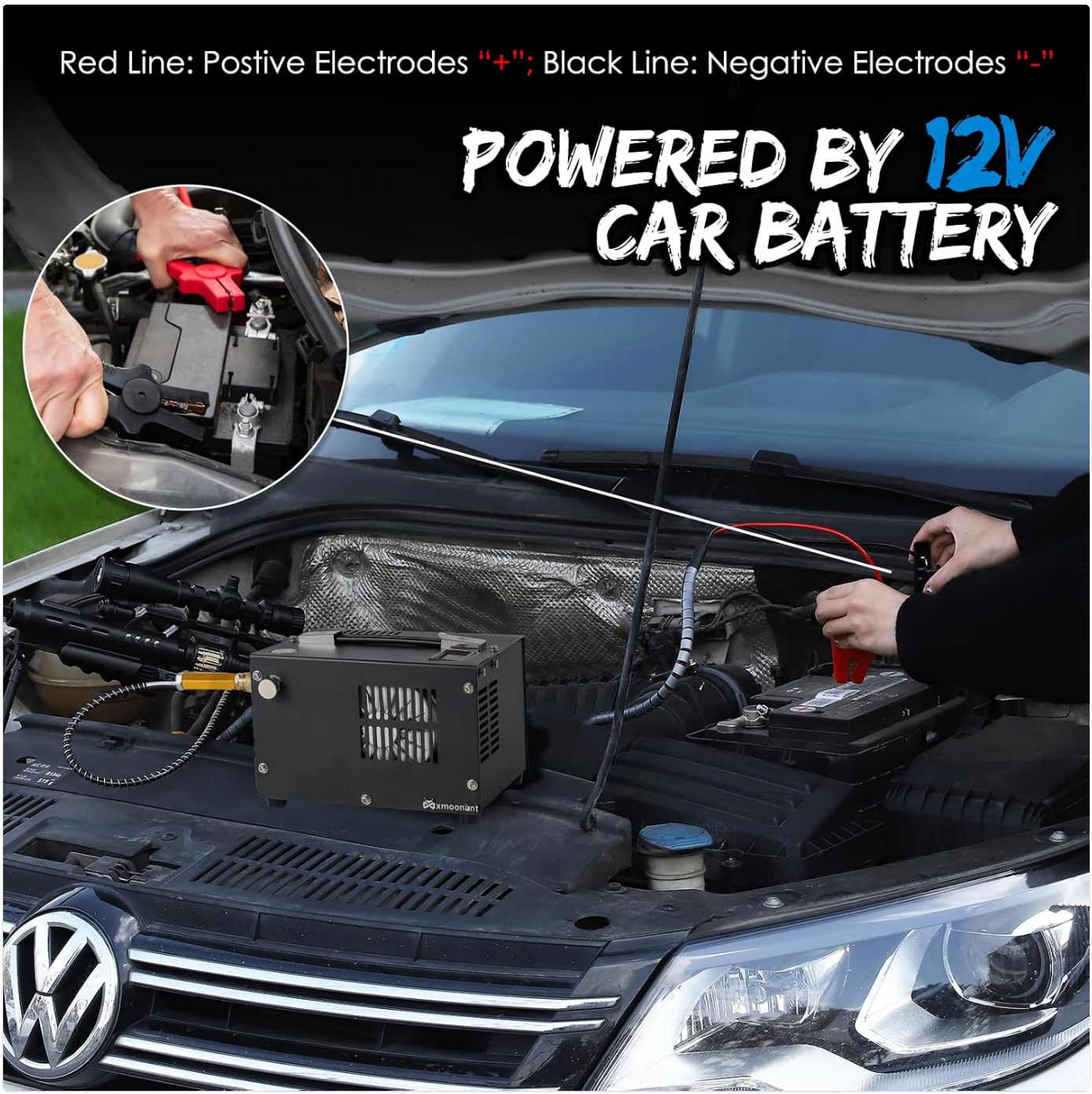


Figure 2: Illustration of connecting the compressor to a 12V car battery. The red clamp connects to the positive terminal, and the black clamp to the negative terminal.

2.3.2 220V/230V AC Home Power Connection (if applicable)

1. Ensure the compressor's power switch is in the OFF position.
2. Connect the AC power adapter (if provided) to the compressor's power input.
3. Plug the AC adapter into a standard 220V/230V wall outlet.
4. Use the compressor indoors and prevent exposure to water.



Figure 3: The compressor connected to a 220V/230V AC power source in a home environment, emphasizing indoor use and protection from water.

2.4 External Oil-Water Separation Filter

The compressor includes an external oil-water separation filter. Ensure this filter is properly connected in line with the high-pressure hose to maintain air purity and protect the compressor from moisture.

3. Operating Instructions

3.1 Pre-Operation Checklist

- Verify all hose connections are tight and secure.
- Ensure the power source is correctly connected and stable.
- Check the pressure gauge on the compressor and the device being filled.
- Ensure the external oil-water separation filter is correctly installed.

3.2 Starting the Compressor

1. Turn on the main power switch on the compressor. The integrated temperature display will activate.
2. Monitor the pressure gauge as the compressor begins to fill the connected device.
3. The compressor operates with a manual stop mechanism. Continuously monitor the pressure to prevent overfilling.

3.3 Monitoring and Stopping

- Observe the integrated temperature display to ensure the machine operates within safe temperature limits.
- When the desired pressure (up to 30Mpa/300Bar/4500PSI) is reached, immediately turn off the compressor using the main power switch.
- Slowly release any residual pressure in the hose before disconnecting it from the device.



Figure 4: Examples of the compressor's wide application range, including filling PCP air rifles, paintball guns, air pistols, and mini diving bottles.

4. Maintenance

4.1 General Care

- Keep the compressor clean and free from dust and debris.
- Store the compressor in a dry, cool place when not in use.
- Avoid exposing the unit to extreme temperatures or direct sunlight for prolonged periods.

4.2 Oil-Water Separation Filter

- Regularly inspect the external oil-water separation filter.
- Drain any accumulated moisture from the filter as needed to ensure optimal air quality and prevent damage to the compressor.
- Replace the filter element periodically according to usage or if performance degrades.

4.3 Cooling System

The compressor features an integrated fan cooling system. Ensure that the air intake and exhaust vents are clear and unobstructed to allow for efficient cooling during operation. Do not block these vents.



Figure 5: A detailed view of the compressor's advanced cooling system, highlighting the built-in fan and efficient airflow for rapid cooling, ensuring oil-free operation.

5. Troubleshooting

Problem	Possible Cause	Solution
Compressor does not start	No power supply or loose connection	Check power cable connections to the compressor and power source. Ensure the power switch is ON. Verify the power source is active.

Problem	Possible Cause	Solution
Low pressure output	Air leak in connections; Clogged filter	Tighten all high-pressure hose connections. Inspect the hose for damage. Check and clean or replace the oil-water separation filter.
Compressor overheats	Blocked cooling vents; Prolonged operation	Ensure cooling vents are clear of obstructions. Allow the compressor to cool down if operating continuously for extended periods.
Unusual noise during operation	Loose components; Internal issue	Turn off the compressor immediately. Inspect for any loose external parts. If the noise persists, contact customer support.

6. Product Specifications

Feature	Specification
Brand	Mxmoonant
Model Number	4500Psi/30Mpa/300Bar
Voltage	12 Volts (DC)
Power	300 Watts
Operating Pressure	30Mpa / 300Bar / 4500PSI
Cooling Mode	Integrated Fan
Lubrication	Oil-free
Stop Mechanism	Manual
Noise Level	Less than 80 dB
Dimensions (L x W x H)	19 x 16 x 12 cm
Weight	5.5 Kilograms
Capacity (for tanks)	Up to 1 Liter (60 cubic inches)
Included Components	Filter



Figure 6: Visual representation of the compressor's dimensions and key performance parameters, including max pressure, motor power, filling speed, noise, and weight.

7. Warranty and Support

For any questions, technical assistance, or warranty claims regarding your Mxmoonant 12V 300bar/4500psi/30mpa PCP Portable Air Compressor, please contact our customer support team. Refer to your purchase documentation for specific warranty terms and contact information. We are committed to ensuring your satisfaction with our products.

© 2024 Mxmoonant. All rights reserved.