

A-iPower SUA4300i

A-iPower SUA4300i Portable Inverter Generator User Manual

Model: SUA4300i | Brand: A-iPower

1. IMPORTANT SAFETY INFORMATION

Read and understand all safety precautions before operating the generator. Failure to follow these instructions can result in serious injury or death.

- **Carbon Monoxide Hazard:** Generators produce carbon monoxide (CO), an odorless, colorless, and poisonous gas. Operate the generator **ONLY outdoors** in a well-ventilated area, far away from windows, doors, and vents. Never operate indoors, in a garage, or in any enclosed space.
- **Fire Hazard:** Gasoline is highly flammable. Store fuel in an approved container in a well-ventilated area. Do not refuel while the engine is running or hot. Avoid spilling fuel.
- **Electrical Shock Hazard:** Do not operate the generator in wet conditions. Ensure all connections are dry and secure. Use only grounded extension cords.
- **Hot Surfaces:** The generator's engine and muffler become very hot during operation and remain hot for some time after shutdown. Avoid contact to prevent burns.
- **CO Sensor:** This generator is equipped with a CO sensor that automatically shuts down the engine if dangerous levels of carbon monoxide are detected. Do not disable or bypass this safety feature.

Always keep children and pets away from the generator during operation.

2. PRODUCT OVERVIEW

The A-iPower SUA4300i is a portable inverter generator designed to provide clean, stable power for various applications, from sensitive electronics to power tools. Its compact design and advanced features make it

suitable for camping, tailgating, home backup, and job site use.



Image: The A-iPower SUA4300i Portable Inverter Generator, showcasing its compact design and control panel.

Key Features:

- **Powerful Engine:** Equipped with a 149cc OHV 4-cycle engine for fuel-efficient and reliable performance.
- **High Output:** Delivers 4,300 starting watts and 3,450 running watts.
- **Quiet Operation:** Operates at a low noise level of 63dB, minimizing disturbance.
- **Pure Sine Wave Power:** Produces less than 3% Total Harmonic Distortion (THD), safe for sensitive electronics.
- **Multi-Featured Control Panel:** Includes various outlets (USB 5VDC, 12VDC, L5-30R 120VAC, Duplex 5-20R 120VAC), CO sensor indicator, LED light, and data center display.
- **Low Idle Technology:** Optimizes engine speed for fuel efficiency and reduced noise.
- **Compact & Portable:** Lightweight design (52.9 lbs) with a telescopic handle and flat-free wheels for easy transport.
- **Extended Run Time:** Up to 7.5 hours at 25% load with a 1.6-gallon fuel tank.

Product Components:

CONTROL PANEL

DATA CENTER DISPLAYS

Voltage, Frequency, Hours, Power, Fuel Bar, Output Ready/Overload/Low Oil Indicators Low Idle and Reset Buttons

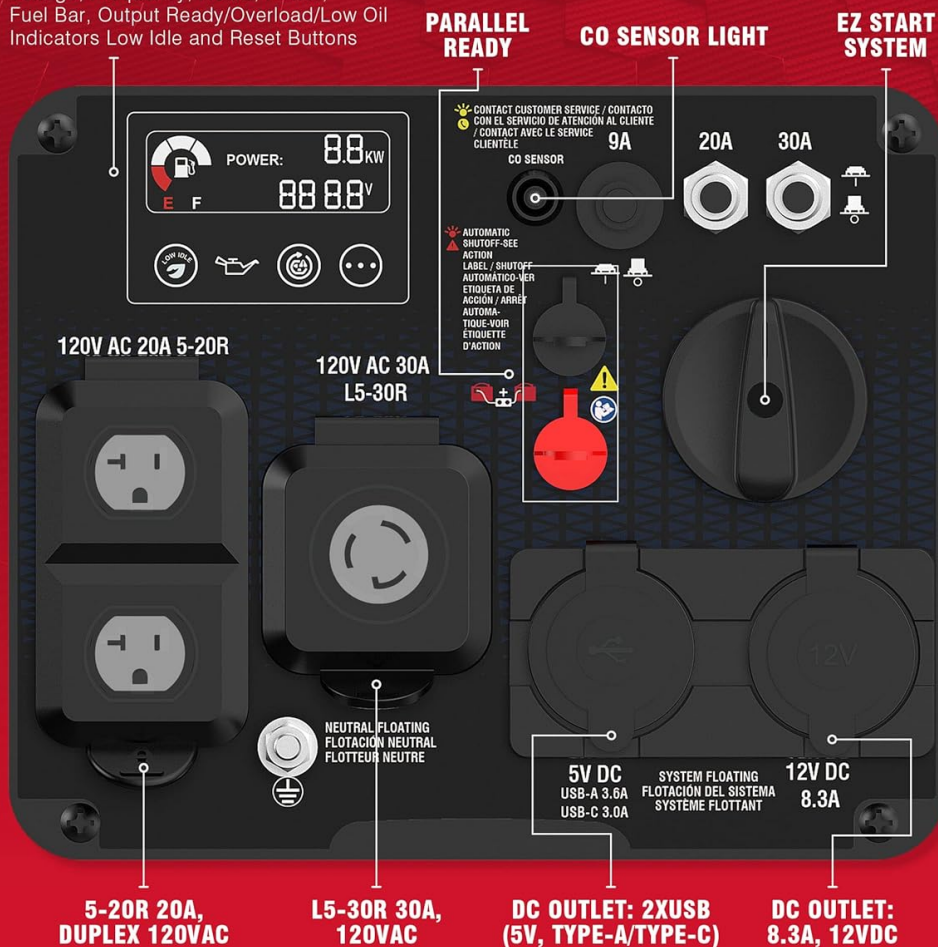


Image: Detailed view of the A-iPower SUA4300i generator control panel. This image highlights the various outlets and indicators, including the data center display, CO sensor light, 120V AC 20A 5-20R duplex outlets, 120V AC 30A L5-30R outlet, 5V DC USB-A/Type-C outlets, and 12V DC 8.3A outlet.

- **Control Panel:** Features a data center display (voltage, frequency, hours, power, fuel bar, output ready/overload/low oil indicators), CO sensor light, LED light, and various outlets.
- **Fuel Tank:** 1.6-gallon capacity for gasoline.
- **Telescopic Handle & Wheels:** For enhanced portability.
- **Engine:** 149cc OHV 4-cycle engine.

DIMENSIONS



Image: Dimensions of the A-iPower SUA4300i generator, illustrating its compact size and the integrated telescopic handle for easy movement.



Image: A person demonstrating the ease of transport of the A-iPower SUA4300i generator by pulling it with its telescopic handle across a grassy surface.

3. SETUP GUIDE

3.1 Unboxing and Included Components

Carefully remove the generator and all components from the packaging. Inspect for any damage. The following items should be included:

- A-iPower SUA4300i Inverter Generator
- Engine Oil
- Oil Funnel
- 30A RV Adaptor
- 12V DC Charging Cables
- Parallel Cables (for connecting two compatible generators)
- Tool Kit
- User Manual (this document)
- Quick Start Guide

Your browser does not support the video tag.

Video: This video provides a visual guide to unboxing the A-iPower SUA4300i generator and identifying the included accessories such as the oil, funnel, 30A RV adaptor, 12V DC charging cables, and tool kit. It also demonstrates the initial setup steps.

3.2 Adding Engine Oil

The generator is shipped without engine oil. It is crucial to add the correct amount and type of oil before the first start-up.

1. Place the generator on a level surface.
2. Locate the oil fill cap/dipstick on the side of the engine.
3. Remove the oil fill cap/dipstick.
4. Using the provided funnel, slowly pour the recommended engine oil (SAE 10W-30) into the oil fill opening until it reaches the upper mark on the dipstick. Do not overfill.
5. Replace the oil fill cap/dipstick securely.

3.3 Adding Fuel (Gasoline)

Use only fresh, unleaded gasoline with an octane rating of 87 or higher. Do not use E85 or mixed fuels.

1. Ensure the generator is turned off and cooled down.
2. Unscrew the fuel cap located on top of the generator.
3. Slowly add gasoline to the fuel tank, being careful not to overfill. Leave a small air gap at the top to allow for fuel expansion.
4. Securely replace the fuel cap. Wipe up any spilled fuel immediately.

4. OPERATING INSTRUCTIONS

4.1 Starting the Generator

Always ensure the generator is placed outdoors in a well-ventilated area before starting.

1. Ensure the fuel valve is in the "ON" position.
2. Turn the engine switch to the "START" position.
3. If the engine is cold, apply choke as needed.
4. Pull the recoil starter handle firmly until the engine starts.
5. Once the engine starts, slowly return the choke to the "RUN" position.
6. Allow the generator to run for a few minutes to warm up before connecting electrical loads.

Your browser does not support the video tag.

Video: This video demonstrates the process of starting the A-iPower SUA4300i generator, including adding fuel, pulling the recoil starter, and connecting an electrical load. It also highlights the generator's lightweight design and ease of transport.

4.2 Connecting Electrical Devices

Once the generator is running and stable, you can connect your electrical devices.

- Plug your devices into the appropriate outlets on the control panel.
- Ensure the total wattage of connected devices does not exceed the generator's running wattage (3,450 watts).
- The control panel features:
 - 2x USB 5VDC ports (Type-A and Type-C)
 - 1x 8.3A 12VDC outlet
 - 1x L5-30R 30A 120VAC outlet (RV Ready)
 - 1x Duplex 5-20R 20A 120VAC outlets

- For sensitive electronics, the inverter technology provides clean power (less than 3% THD).



Image: The A-iPower SUA4300i generator operating on a grassy lawn, with an orange extension cord plugged into its control panel, demonstrating its outdoor use capability.

4.3 Eco Mode

The Eco Mode switch, when activated, allows the engine to automatically adjust its speed to match the load. This reduces fuel consumption, extends run time, and lowers noise levels when full power is not required.

- Toggle the Eco Mode switch to "ON" for fuel efficiency with lighter loads.
- Toggle to "OFF" when maximum power is needed for heavier loads.

4.4 Parallel Operation

The SUA4300i generator is parallel-ready, allowing you to connect two compatible A-iPower inverter generators for increased power output. Use the provided parallel cables and follow the instructions in the Quick Start Guide or a dedicated parallel kit manual for safe connection.

5. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your generator. Always turn off the engine and allow it to cool before performing any maintenance.

5.1 Engine Oil Change

Change the engine oil after the first 20 hours of operation, and then every 100 hours or annually, whichever comes first.

1. Run the engine for a few minutes to warm the oil, then shut it off.

2. Place a drain pan beneath the oil drain plug.
3. Remove the oil drain plug and oil fill cap/dipstick to allow the oil to drain completely.
4. Reinstall the oil drain plug.
5. Refill with the recommended amount of new SAE 10W-30 engine oil using the funnel.
6. Replace the oil fill cap/dipstick.

5.2 Air Filter Cleaning

Inspect the air filter every 50 hours or more frequently in dusty conditions. Clean or replace as needed.

1. Remove the air filter cover.
2. Remove the foam air filter element.
3. Wash the element in warm, soapy water, rinse thoroughly, and allow it to air dry completely.
4. Lightly apply engine oil to the foam element and squeeze out any excess.
5. Reinstall the air filter element and cover.

5.3 Spark Plug Inspection

Inspect the spark plug every 100 hours or annually. Replace if necessary.

1. Remove the spark plug cap.
2. Use a spark plug wrench to remove the spark plug.
3. Check for carbon buildup or damage. Clean with a wire brush if needed.
4. Check the spark plug gap (refer to specifications for correct gap).
5. Reinstall the spark plug and cap.

5.4 Storage

For long-term storage (over 30 days), proper preparation is essential to prevent fuel degradation and engine damage.

- Add a fuel stabilizer to the fuel tank and run the engine for a few minutes to circulate it.
- Drain the fuel tank and carburetor bowl completely, or run the engine until it runs out of fuel.
- Change the engine oil.
- Remove the spark plug and pour a small amount of engine oil into the cylinder. Pull the recoil starter a few times to distribute the oil, then reinstall the spark plug.
- Clean the exterior of the generator.
- Store in a clean, dry, well-ventilated area.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your A-iPower SUA4300i generator.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Engine will not start	No fuel, low oil, engine switch OFF, choke incorrect, spark plug issue.	Check fuel level, add oil, turn engine switch ON, adjust choke, inspect/clean spark plug.
No power output	Overload, circuit breaker tripped, Eco Mode ON with heavy load, faulty connection.	Reduce load, reset circuit breaker, turn Eco Mode OFF for heavy loads, check connections.
Engine runs, then stops	Low fuel, low oil, CO sensor activated, clogged fuel filter.	Add fuel, add oil, move generator to a more ventilated area, clean/replace fuel filter.
CO Sensor light active	High carbon monoxide levels detected.	Immediately move the generator to an open, well-ventilated outdoor area. Allow it to cool and ventilate before restarting.

If you continue to experience issues, please refer to the "Customer Support" section.

7. SPECIFICATIONS

Feature	Detail
Brand	A-iPower
Model Name	SUA4300i
Engine Type	149cc OHV 4-Stroke
Fuel Type	Gasoline
Starting Wattage	4300 Watts
Running Wattage	3450 Watts
Voltage	120 Volts
Frequency	60 Hz
Noise Level	As low as 63dB
Fuel Tank Volume	1.6 Gallons
Runtime (25% load)	7.5 hours

Feature	Detail
Item Weight	52.9 Pounds
Dimensions (L x W x H)	19.7"L x 12.2"W x 18.5"H
Total Power Outlets	5 (2x USB, 1x 12V DC, 1x L5-30R, 1x Duplex 5-20R)
Special Features	CO Sensor, Fuel Efficient, Lightweight, Low Oil Shutdown, Overload Protection, Portable, Super Quiet, Telescoping Handle, USB Port

8. WARRANTY INFORMATION

The A-iPower SUA4300i Portable Inverter Generator comes with a **3 Year Limited Manufacturer's Warranty**. Please retain your proof of purchase for warranty claims. For full details on warranty coverage, terms, and conditions, refer to the warranty card included with your product or visit the official A-iPower website.

9. CUSTOMER SUPPORT

For technical assistance, parts, or warranty inquiries, please contact A-iPower Customer Service. Have your model number (SUA4300i) and serial number ready when contacting support.

Online Resources: Visit the A-iPower official website for FAQs, additional manuals, and support contact information.

Contact Information: Refer to the contact details provided in your Quick Start Guide or on the product itself for the most up-to-date support channels.