



Lion Safari ME™

User Manual

Lithium Iron Phosphate Solar Generator





READ THIS MANUAL IN ITS ENTIRETY BEFORE OPERATING THE UNIT.

This portable unit provides safe, silent, and renewable electric power. This power unit is useful in emergencies, and for work and play. It is very important to carefully read this user manual before using the product.

The Safari ME includes excess-voltage, low-voltage, overload, short-circuit, and excess-temperature protections. It also has built-in visual and audio alarms that are meant to alert you to potential problems that may cause damage to the unit. The overload circuitry will protect against damage to the unit and serve as a safety measure for anyone operating the unit.

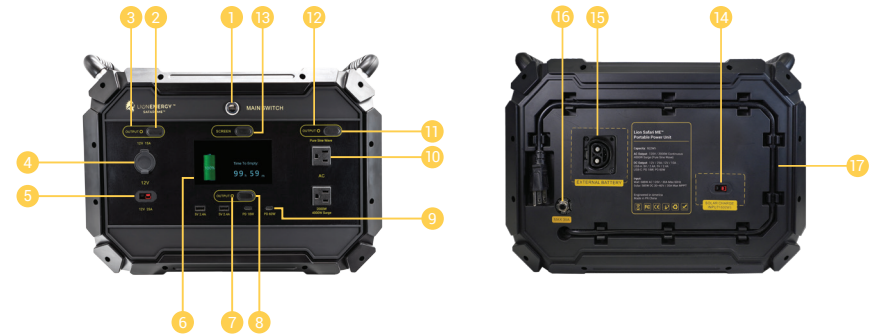
Carefully read and strictly comply with all safety directives:

- For better performance, fully charge the unit before using it.
- Do not use the unit as a toy.
- Do not insert fingers or hands into any of the units outlets.
- Only use recommended accessories.
- Do not operate the unit with cables or charging adapters that exhibit any damage.
- Never attempt to modify or alter the unit, cables, or accessories.
- Do not allow water to contact this unit or immerse it in water.
- Do not operate this unit in the presence of flammable liquids, gases, or dust.
- Do not permit the internal battery of this unit to freeze. Never charge a frozen battery.
- Do not expose or store this unit to excessive heat (>115 ° F).
- Only store the unit at temperatures ranging from 14° to 115° F.
- Charge only at temperatures ranging from 32° to 115° F.

Package Contents

Lion Safari ME solar generator with built in AC wall charger (668W).

Part Identification



Part	
1	Main Button
2	12V Output ON / OFF Button
3	12V Output Indicator Light ON / OFF LCD
4	12V "Cigarette Lighter" Output
5	12V Anderson™ Compatible Output
6	LCD Display
7	USB Output Indicator Light
8	USB Output ON / OFF Button
9	USB 3.0, QC, and PD Outputs
10	AC Output Socket
11	AC Output ON / OFF Button
12	AC Output Indicator Light
13	Screen ON / OFF
14	Solar Panel Charge Connection
15	Safari ME-XP Connection (Sold Separately)
16	Circuit Breaker Reset Button
17	Built-in Power Cord for AC Charging

How to Use the Power Unit

The Safari ME is an energy storage solution that features 668 (W) charging, up to 600W solar charging and a 2,000W pure sine wave inverter with a 4,000W surge. It supports 12V, 25A DC output, two USB 2.4A outputs, an external battery (sold separately), and TFT screen display. It is able to power a range of devices, virtually anything you can plug into a standard 15A wall outlet. Refer to the Parts Identification section above and follow the operating instructions below.

Turn the power unit on or off

Press the main button and then turn ON 12V, USB, and/or AC power outputs. Press the main button again to turn OFF power to the entire unit.

Tip: Press and hold the “Screen” button for approximately 5 seconds to allow the main display to toggle ON and OFF (so the light doesn’t stay on continually). Press and hold for another 5 seconds to have the main display stay illuminated.

Supply power to a device

Follow these steps to supply to a 12V device (cigarette or Anderson™ compatible connection):

1. Press the main button. The LCD display will illuminate.
2. Press and Insert the DC cable into either the DC 12V output port or the 25V Anderson compatible output port.
3. With the main unit ON, press the 12V output button to turn ON the DC output.

Supply power to an AC device

Follow these steps to supply power to an AC device:

1. Press the main button. The LCD display will illuminate.
2. Connect an AC cable to either of the AC output ports.
3. With the main unit ON, press the AC output button to turn ON the AC output.

Supply power to USB-A or USB-C devices

Follow these steps to supply power to a USB-A or USB-C device:

1. Press the main button. The LCD display will illuminate.
2. Connect a USB cable to any of the appropriate USB outputs.
3. With the main unit ON, press the USB output button to turn ON the USB output.



Maximum AC Power Output

The maximum continuous power output is 2,000W. If device power requirements exceed 2,000W, do not connect the device to this power unit.



Voltage Specifications Vary by Country

This unit supplies power at 110V/60Hz. Consider this when connecting any devices to this power unit.

Charging the power unit from a wall outlet or 24V solar panel

Follow these steps to charge the Safari ME:

1. To charge from a standard 120V wall outlet, plug the AC charging cord on the back of the unit into a standard wall outlet.
2. To charge the 24V solar panel (sold separately), connect the solar panel with the Anderson compatible connection cable to the solar Anderson compatible connection input on the back of the Safari ME unit. You can connect up to six (6) 24V solar panels.

NOTE: On the LCD display, you can see the charging status. When you are done charging, disconnect the AC cord from the wall or disconnect the solar panel(s).

Power outputs supply power when charging

All power outlets will supply power to devices when the power unit is charging.

Circuit breaker

The circuit breaker will activate if power limits are exceeded. To restore power to the entire unit, simply press the circuit breaker button on the back of the unit.

Change the display mode

By default, once the main power is on the display is always on. To conserve power and place the display into “always-off” mode, press-and-hold the Screen button for five seconds. Press the **Screen** button again for five seconds to return to “always-on” mode.

Charge many types of devices

The power unit can power many types of devices, such as lights, mobile phones, laptops, and radios. The total number of devices that the power unit can support depends on the energy consumption of each device. Energy consumption is measured in watts (W). The unit can supply power to multiple devices that require a total of 2,000W of energy or less.

Power supply duration

The duration of power supply depends on the energy consumption or watt usage of all connected devices. Lower total energy consumption will permit the power unit to supply power for more time. Here is a guideline for estimating the run time of a device: $\text{Watt Hours} / \text{Watts} = \text{Estimated Run Time}$. For example, if the device you want to power uses 36W and the power unit has 832Wh then the estimated run time would be $832 / 36 = 23.1$ hours. The main display also shows how long the device(s) you are charging will take to charge and how much energy is in the Safari ME.

Automatic shutoff

When all connected devices are no longer drawing power, the power unit will automatically turn off to conserve energy. NOTE: To turn the ME back on, press the main power button twice.

Connecting optional expansion battery (Safari ME-XP)

The Safari ME-XP is a lithium iron phosphate expansion battery for the Safari ME and can be purchased separately. The XP can easily be connected to the ME and provides an additional 2,688Wh of stored energy. Simply plug the connecting cable from the back of the XP into the back of the ME. To charge the XP, connect it to the ME and charge the ME. Both units will then charge together.



Tips for improving performance of your power unit

These tips will help you get better service from your power unit:

- This power unit contains a durable, high-quality, high-capacity lithium iron phosphate battery. It has no memory effect. To achieve the optimal charging capacity, charge the unit within a temperature range of 50° - 86° F.
- The LCD display provides charging status and current power. When done charging the unit from the wall outlet or solar panel, unplug it.
- To extend battery life of the Safari ME, use it and charge it at least once every 3-4 months. We recommend using it more often than that.

Troubleshooting

If none of your devices are charging after turning on the power — Press the main switch to ensure that the power unit is on. Make sure you also have the output power turned on. Also remember that any device that requires more than 2,000W cannot be charged by this unit.

If the power unit won't turn on — You may need to press the circuit reset button on the back of the unit. If it has not been in use for awhile, it may be necessary to recharge the power unit before trying to charge other devices with the Safari ME.

Battery Information

Before trying to charge other devices with the Safari ME, please note:

- The Safari ME contains lithium iron phosphate battery inside.
- Do not attempt to remove the battery, since this may damage the unit.
- The battery can be charged and discharged over 2,500 times (main unit) 3,500 times (expansion pack or Safari ME-XP, which is sold separately) but it will eventually lose capacity with heavy use.

Technical Specifications

AC parameters	Rated Power / Surge	2,000W / 4,000W
	Main input voltage	102-140 VAC
	Main input frequency range	45-65 Hz
	Inverter voltage	120 VAC \pm 10%
	Efficiency	Typically > 88% , 90% maximum
	Switching time gap	10ms standard, 20ms maximum
	Output wave	Pure sine wave
Battery parameters	Rated battery voltage	25.6 VDC
	Battery working range	21-28.8 VDC
	Battery type	Lithium Iron Phosphate (LiFePO4)
	Maximum capacity	922Wh
	Maximum Expansion Battery Capacity (Sold Separately)	2,688Wh
PV charge parameters	Maximum charge power	500W for standard, 600W maximum
	PV charge range	30-60 VDC; Solar panel must be >36 VMP <60 VOC
	Maximum charge current	20A
	Efficiency	93% standard, 95% maximum
AC charge parameters	Maximum charge power	750 W
	Charge voltage range	90-264 VAC
	Charge frequency range	47-53 Hz
	Charge current	25A standard
	Efficiency	90% nominal, 95% maximum
DC output parameters	DC output voltage	12 VDC
	Maximum DC output current	25A
	12V or "Cigarette Lighter"	10A standard, 10-15A turn off in 3 minutes, >15A will turn off immediately
	USB	2 x 2.4A
	QC 3.0	12V, 1.5A / 9V, 2A / 5V, 3A
	PD	20V, 3A

FREQUENTLY ASKED QUESTIONS

BASICS

01. What is the Safari ME?

The Safari ME is the latest in Lithium battery technology for portable power needs. It replaces traditional gas generators with the safest Lithium batteries on the market today. It is lightweight for the amount of power it has. Think of it as a safe, silent, renewable generator without the need for gas, pollution or all that weight.

02. What does the Safari ME power?

You can use it to power a wide variety of devices like cell phones, laptops, tablets refrigerators, freezers, TVs, lights, hot plates or grills, power tools, and the list goes on. Virtually any device you can plug into a standard wall outlet (15A), the Safari ME can power it.

03. How can you figure out how long the Safari ME will power specific devices?

The ME has a continuous 2000W of power output (watts of power output) and 922Wh (watt hours) of stored energy. That means you can power devices that require up to 2000W of power for various periods of time. To calculate how long the ME can power a device, use this formula: $Wh / W = \text{Estimated Run Time}$. For example, if the device requires 50W of power and the ME has 922Wh then the device can be powered for approximately 18.5 hours ($922 / 50 = 18.44$)

04. Can it be used to store solar power or solar energy?

The Safari ME is a great energy storage unit for solar power from solar panels. It can store 922Wh (watt hours) of energy.

05. How long can the Safari ME hold a charge?

It will maintain its charge for up to a year without having to charge it. This is known as shelf life or storage life. However, we recommend using it more frequently, at least every 3-4 months. It can be used daily around the house, outside or on adventures.

06. Why should I buy the Safari ME?

The Safari ME is made from the highest quality and longest lasting battery technology – Lithium. It's great for daily use when you want to not be tethered to the wall outlet and it is a life-saver in emergencies. It is safe, silent and renewable unlike gas generators.

07. What are the top benefits of the Safari ME?

There is a lot to love about the Safari ME:

- **Renewable Solar Generator**

You can use the power of the sun to fully recharge the ME in as little as 95 mins so you can use power without running out of power.

- **Environmentally Friendly**

If you care about the environment, the ME produces zero emissions and has no carbon footprint during use.

- **Faster Charge Time**

If you prefer to recharge it from a wall outlet, it only takes just over 80 mins to completely recharge... from empty to full!

- **Expandable for More Energy**

If you need more stored energy, you can expand the ME capacity by adding the optional expansion pack called the Safari ME-XP and that gives you 3x the stored energy as the ME alone. That means you can use it 3x longer on a single charge with the ME and the XP combined.

- **Power Almost Anything**

Because it has so much power and multiple output types such as AC, USB and 12V, you can virtually power anything you can plug into a standard wall outlet with the Safari ME. It has an initial 4000W Surge for that extra power you may need.

- **Power Pass Through**

It has a pass through power mode, meaning you can charge it while using it and once it's fully charged, you can leave it plugged in to its charging source (the sun or wall outlet) and the power passes through it and it doesn't have to use the energy that is stored in it.

- **Easy to Transport**

It's easy to move from place to place because it's light weight compared to other generators in its size and it has convenient carrying handles built right in.

08. What is the Safari ME-XP?

The Safari ME-XP is an optional expansion battery for the Safari ME. It plugs into the back of the ME and gives you 3x the stored energy than the ME alone (922Wh for the ME + 2048Wh for the XP = 2970Wh). The XP must be used with the ME. The XP gives you more stored energy when used with the ME.

PRICING

Safari ME
MSRP \$2,350



Optional ME-XP
(expansion battery)
MSRP \$1,750





LIONENERGY™

Warranty Information

Serial Number: _____

Purchase Date: _____



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Power Your Life.