



LIONENERGY™

CUB MS™

12V
8,000mAh
Jump-Starter/Charger
User Manual



WARRANTY INFO:

Serial number _____

Purchase date _____



CUSTOMER SERVICE:

385.375.8191. Monday-Friday, 9:00 A.M.-5:00 P.M. MST. Please call our customer service department if you need to return your Cub MS™.

WELCOME TO THE PRIDE.

The Lion Energy™ journey began in 2001. We started this venture to help people prepare for potential emergencies and become self-reliant. We realized we could help in areas of food, water, lights, and power. And our passion for portable power ignited. We wanted to provide the safest, most reliable, silent portable power products and we wanted them to be clean and renewable. Our goal is to create products that are good for people and good for our planet! At Lion Energy, that's exactly what we do.

Lion Energy is built upon the principles of unmatched safety, unwavering reliability, and continual renewability advancements. That foundation, coupled with a promise of excellent customer service, has led to a growing brand with an extremely loyal customer base.

As we forge ahead, the foundations of customer experience, safety, reliability, and innovative renewability remain. We are committed to a continued focus on providing the best emergency preparedness power, portable solar power, and home storage power. Lion Energy is committed to providing our customers peace of mind and the freedom to live life on their terms.

For latest info go to www.lionenergy.com



735 S. Auto Mall Drive Suite 200
American Fork, UT 84003



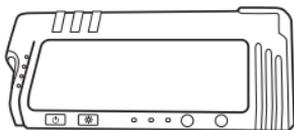
www.lionenergy.com
info@lionenergy.com



Corporate: 801-727-9270
Tech Support: 385-375-8191

PRODUCT CONTENTS

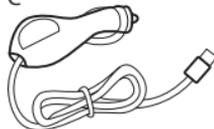
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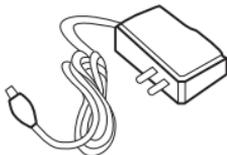
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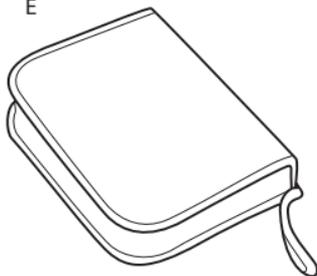
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D



E



Part	Description
A	Lion Cub MS
B	Jumper cables with fuse
C	DC or cigarette car charger
D	AC charger
E	Storage pouch

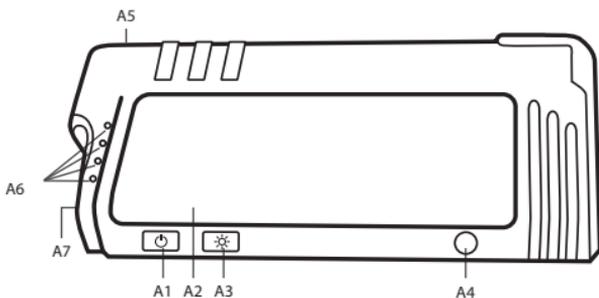


SAFETY INFORMATION

PLEASE read this entire manual before attempting to use this product.

1. Avoid dangerous environments. Do not charge this item in rain, snow or damp or wet locations. Do not use this item or charge in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials) because sparks may be generated when charging or discharging this item may cause a fire.
2. Charge in a well-ventilated area. Do not allow smoking or open flames near a charging battery. Vented gases may explode.
3. Do not burn or incinerate this item as it may explode, causing personal injury or damage. Toxic fumes and materials are created when batteries are burned.
4. Do not crush, drop or damage this item. Do not use this item if it has received a sharp blow or has been dropped, run over or damaged in any way (e.g., pierced with a nail, hit with a car, etc.).
5. Do not disassemble. There are no serviceable parts. Disassembly increases the risk of electric shock, fire and exposure to battery chemicals that may cause personal injury or damage.
6. Battery chemicals can cause injury. If this jumper becomes damaged and leaks, dispose of properly using rubber gloves. If skin is exposed to any chemicals, wash with soap and water and rinse with vinegar or if eyes are exposed to chemicals, immediately flush with water for 20 minutes and seek medical attention.
7. Do not short-circuit. This item will short-circuit if a metal object makes connection to the AC or DC output ports. Do not place this item near anything that may cause a short circuit, such as coins, keys or nails. A short-circuited battery may cause fire or personal injury.
8. Never charge or jump-start a frozen battery.
9. Store this item in a cool, dry place. Do not store this item for more than 10 days in an environment where temperatures may exceed 120 °F (49 °C), such as direct sunlight. Doing so may cause damage to the item.
10. This item is not intended for commercial applications.

TECHNICAL SPECIFICATIONS



Part	Description
A1	Power button for DC/12V output
A2	LED lantern
A3	Power button to turn on/off light

A4	AC/DC charging input
A5	DC/12V jumper cables output
A6	Charge indicator lights (4 blue LEDs)
A7	USB output

CHARGING TIMES:

110V AC wall charger: 4 hours

12V car charger: 5 hours

BATTERY SPECIFICATIONS:

Cell technology: Lithium polymer

Cell capacity: 8,000mAh

Peak current: 400A

Life cycles: 500

Shelf life: 3-6 months; long-term storage at 50% capacity and recharging every 3 months recommended

LIGHT:

LED lantern output: 130+ lumens

LED flashing output: 130+ lumens

OUTPUT PORTS:

Vehicle jump-starter: 12V, up to 400A

USB: 5.2V, up to 2.1A

INPUT CHARGING PORTS:

AC: 15V, up to 1A

DC: 12V, up to 1.5A

GENERAL:

Weight: 14.2 oz (403 g)

Dimensions: 7.3 x 3.8 x 1.3 in
(185 x 96 x 33 mm)

Operating usage temperature:
-4-185 °F (-20-85 °C)

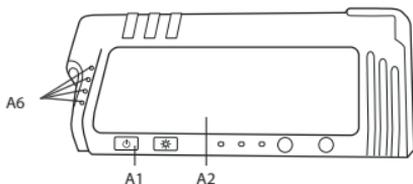
OPERATING INSTRUCTIONS

CHARGE INDICATOR LIGHTS:

1. Press light button (see A3) quickly (for 0.5 seconds) to check battery charge level. The number of continuously lit blue LEDs (see A6) indicates the charge level.
2. When the unit is charging, the indicator lights will flash in sequence.
3. The entire unit, including the indicator lights, will shut off automatically after 30 seconds of inactivity. The jumper port will remain active.

Indicator Lights	0	1 FLASHING	1	2	3	4
Battery Charge	0%	<25%*	25%	50%	75%	100%

* Approaching auto shut-off

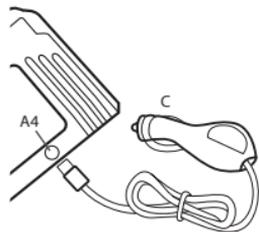
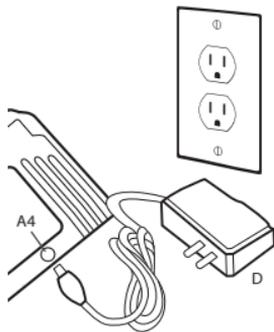


CHARGING THE BATTERY — USING 110V AC CHARGER:

To charge the Cub MS, connect the AC charger plug (see D) to the Cub MS charging input (see A4). Then plug the AC charger into any wall outlet. The blue charge-indicator LEDs will flash. Once all four blue LEDs are continuously lit, the Cub MS is fully charged.

CHARGING THE BATTERY — USING 12V CAR CHARGER:

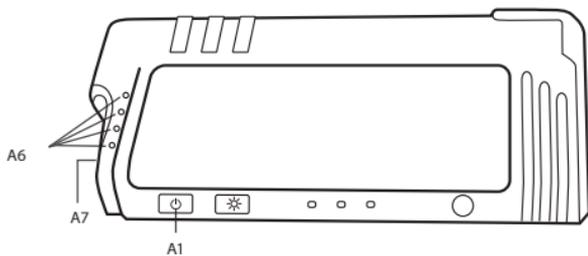
To charge the Cub MS, connect the DC car charger (see C) to the charging input (see A4). Then plug the DC car charger into any 12V cigarette lighter outlet. The blue charge-indicator LEDs will flash. Once all four blue LEDs are continuously lit, the Cub MS is fully charged.



OPERATING INSTRUCTIONS (CONT.)

CHARGING USB DEVICES (PHONES, MUSIC PLAYERS, TABLETS):

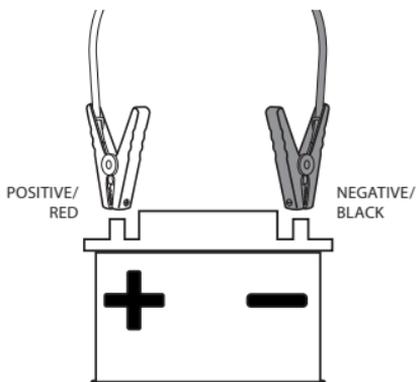
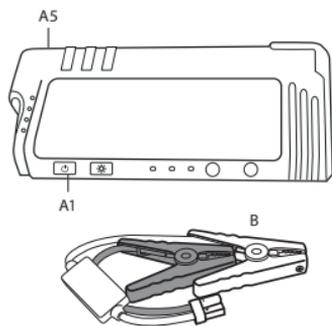
1. Press the power button (see A1) quickly (for 0.5 seconds) to turn the Cub MS on.
2. Make sure the Cub MS has a charge. NOTE: If you are using the Cub MS to jump start a vehicle, at least two of the blue LEDs (see A6) should be continuously lit indicating a 50% charge.
3. Plug the USB cable of your USB device into the USB output of the Cub MS (see A7).
4. When the desired charge level for your device is reached, disconnect the device from the Cub MS.
5. The Cub MS will turn off automatically 30 seconds after you remove the device you are charging from the Cub MS.



OPERATING INSTRUCTIONS (CONT.)

JUMP-STARTING A VEHICLE'S BATTERY:

1. Press power button (see A1) quickly (for 0.5 seconds) to check how much charge/power is currently in the Cub MS. For safe operation, make sure that the blue LEDs indicate at least a 50 percent charge.
2. Before proceeding to jump-start your battery, make sure to correctly identify both positive and negative terminals and their position in relation to your jumper cables. (Always remember RED = POSITIVE and BLACK = NEGATIVE.)
3. Before proceeding to jump-start your battery, make sure to clean both the positive and negative terminals on your vehicle's battery for the best connection possible. (Do not wipe your hand on your clothes afterward; battery acid residue may damage your clothing.)
4. Plug the jumper cables (see B) into your Cub MS jumper-cable output port (see A5).
5. Connect your jumper cables to your vehicle's battery by FIRST connecting the (+) POSITIVE/RED cable clamp onto your vehicle's (+) POSITIVE battery terminal and THEN connecting the (-) NEGATIVE/BLACK cable clamp onto your vehicle's (-) NEGATIVE battery terminal. See figure below.
6. Start the vehicle.
7. Immediately disconnect the Cub MS. The Cub MS will automatically turn off 30 seconds after the cables are removed.



OPERATING INSTRUCTIONS (CONT.)



WARNING

DO NOT crank the engine for longer than four seconds. This can cause damage to the Cub MS or the vehicle's battery. If the engine fails to start after 20 seconds of continuous cranking, remove the jumper cable clamps from the vehicle's battery and wait two minutes before reconnecting and trying again. If you reconnect too soon, this may cause the Cub MS and cables to become very warm and the Cub MS to not operate.

CAUTION: Cranking the engine more than six consecutive times can cause the Cub MS to become very warm and may become damaged. Please handle with care and follow all safety instructions.

NOTE: If the engine does not crank or start, there may be a problem other than a discharged battery. Call your local mechanic for service. The effectiveness of the Cub MS will vary based on engine size and the age of the vehicle.

CARE AND MAINTENANCE:

1. Store the Cub MS within easy reach of both front-seat passengers.
2. Recharging after every use is recommended. This reduces your risk of being stranded with little to no charge left in the Cub MS.
3. Keep the Cub MS and all components clean at all times.
4. Do not immerse the Cub MS in water or any other fluids.
5. Wipe off debris using a soft cloth moistened with water only. Do not use any cleaning solutions or solvents.
6. NEVER disassemble the Cub MS. It has no serviceable parts and must be repaired by an authorized service center.

TROUBLESHOOTING

PROBLEM	CAUSE	ACTION
The Cub MS USB/12V devices will not charge.	The Cub MS may not have a sufficient charge.	Charge the Cub MS.
The Cub MS does not jump-start a vehicle's battery.	Either the jumper cable clamps are not properly connected or the Cub MS may not have a sufficient charge.	Make sure that the jumper cable clamps are correctly connected to the corresponding battery terminals and that the Cub MS has a full charge.

WARRANTY INFORMATION

WARRANTY DURATION:

This product is warranted to the original purchaser from the original purchase date for one year subject to the warranty coverage described herein. If this product is used for commercial or industrial purposes, the warranty is limited to 90 days from the date of purchase.

WARRANTY COVERAGE:

This product is warranted by Lion Energy, LLC (referred to hereinafter as Lion Energy), 735 S. Auto Mall Drive Suite 200, American Fork, Utah 84003 to be free from defects in materials and workmanship.

The warranty is void under the following conditions:

- Damages resulting from unauthorized repairs or alterations to the original product.
- Improper use of unit or any other failure to operate this product in accordance with the instructions provided in this owner's manual.

WARRANTY PERFORMANCE:

During the above described warranty period, should your product exhibit a defect in materials or workmanship, such defect will be repaired or replaced by the manufacturer.

WARRANTY DISCLAIMER:

No warranty, oral or written, other than the above warranty is made with regard to this product. No implied warranties of manufacturer regarding this product, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the warranty period described above. Manufacturer shall not be liable for loss of this product or any other incidental or consequential costs, expenses or damages incurred by the purchaser.

LION CUB MS™

IT CAN POWER...



Car



Truck



Boat



Phone



Lamp



Camera

*Run times may vary

MORE POWER TO LOVE...



SOLAR PANELS

Harness the power of the sun and recharge or power your electronic devices. This 100W Foldable Solar Panel comes with a 6' extension cord and a 20-year life expectancy.



CUB GO™

Get more power with the new Lion CUB GO portable power unit. It has 120Wh and 150W output from the Lithium battery source and can be charged from an AC source or by solar.



SAFARI LT™

This great and little power unit packs a punch and weighs only 11 pounds. Take it camping, tailgating, to the beach or anywhere you need power.



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