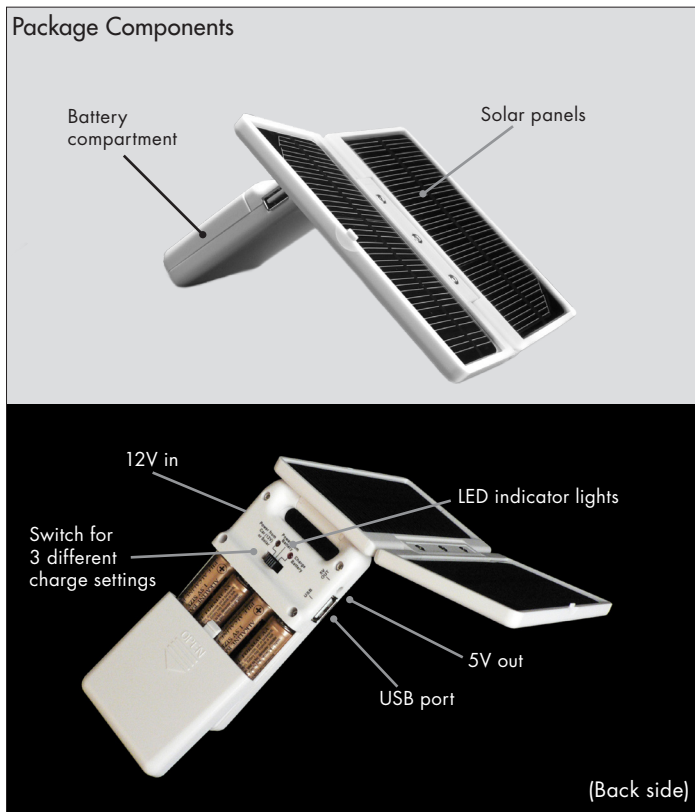


Solar e Charger



User's Manual

Package Components



Thank you for purchasing Solar e Power by Wagan Tech. This product will provide years of reliable service with normal care and proper treatment. Please read all operating instructions carefully before use.

Using the latest in photovoltaic technology, the Solar e Power is designed to directly charge electronic devices and rechargeable AA and AAA batteries. This is ideal for recharging Ni-MH, Ni-cad, and Li-Ion batteries used in cellular phones, PDAs, cameras, and other handheld devices using AA or AAA batteries. The Solar e Power is also capable of using alkaline batteries to directly charge electronic devices.

The Solar e Power has such features as a built-in “blocking diode”, which prevents the reverse flow of electricity from the batteries to the solar panels when the solar panels are not supplying electricity. By utilizing photovoltaic cells as solar panels, the charger has the latest technology in sunlight energy conversion.

Warning: Before attempting to start vehicle, this unit must be removed from the vehicle's 12V socket.

Charge electronic devices from Sun Light

1. Remove the vehicle's 12V plug from the unit.
2. Slide the switch to “Power from Car (12V) or Solar”.
3. Open the unit to expose the solar panels.
4. For phones: Plug the appropriate adaptor included in the kit to your phone and the other end into the socket labeled “5V OUT” on the side of the unit.
For other electronic devices: Plug your USB into the USB port on the side of the unit.
5. Place the charger under bright sunlight and adjust the stand angle so that the solar panel directly faces sunlight.

1. The LED lights up and charging will start whenever the solar panel is exposed to strong sunlight. The more sunlight received, the more energy will be stored into the batteries.

Charge electronic devices from the car (12V DC)

1. Slide the switch to "Power from Car (12V) or Solar".
2. For phones: Plug the appropriate adaptor included in the kit to your phone and the other end into the "5V OUT" on the side of the unit.
For other electronic devices: Plug your USB into the USB port on the side of the unit.
3. Plug in the 12V DC jack into the DC socket labeled "Car (12V) In".
4. The LED lights up and charging will start.

Charge rechargeable batteries from sunlight

1. Remove the vehicle's 12V plug from the unit.
2. Open the battery compartment.
3. Correctly place 4 rechargeable batteries (AA or AAA) in the battery compartment. *Note: The charger is designed to charge 4 batteries of the same size and same brand. Do not attempt to mix different size and different brand rechargeable batteries or charge less than 4 batteries at the same time. Different size and brands of batteries are of different resistance which can greatly affect the charging system.*
4. Slide the switch to "Charge Battery".
5. Place the charger under bright sunlight and adjust the stand angle so that the solar panel is facing direct sunlight.

6. The LED lights up and charging will start whenever the solar panel is exposed to a strong sunlight. The more sunlight received, the more energy will be stored into the battery.

Charge rechargeable batteries from car (12V DC)

1. Open the battery compartment.
2. Correctly place 4 rechargeable batteries (AA or AAA) in the battery compartment. *Note: The charger is designed to charge 4 batteries of the same size and same brand. Do not attempt to mix different size and different brand rechargeable batteries or charge less than 4 batteries at the same time. Different size and brands of batteries are of different resistance which can greatly affect the charging system.*
3. Slide the switch to "Charge Battery".
4. Plug in the 12V DC jack into the DC socket labeled "Car (12V) In".
5. The LED lights up and charging will start.

Charge electronic devices from rechargeable batteries

1. Make sure your rechargeable batteries are fully charged.
2. Slide the switch to "Power from Battery".
3. For phones: Plug the appropriate adaptor included in the kit to your phone and the other end into the "5V OUT" on the side of the unit.
For other electronic devices: Plug your USB into the USB port on the side of the unit.
4. The LED lights up and charging will start.

Charge electronic devices from normal Alkaline batteries

1. Open the battery compartment.
2. Correctly place 4 alkaline batteries (AA or AAA) in to the battery compartment. *Do not mix batteries of different types, brands, or sizes.*
3. Slide the switch to "Power from Battery".
4. For phones: Plug the appropriate adaptor included in the kit to your phone and the other end into the "5V OUT" on the side of the unit.
For other electronic devices: Plug your USB into the USB port on the side of the unit.
5. The LED lights up and charging will start.

How to calculate charging time

The time it takes to recharge a battery depends on the following:

1. The capacity of the battery.
2. The existing charge of the battery
3. Intensity of the sunlight.

The charging time of solar panels can be estimated by the following equation:

$$(\text{battery capacity in mAh} / 150) \times 1.2 = \text{charge time in hours}$$

This equation assumes the solar panels have "full sunlight", defined as maximum sun exposure at noon on a clear day.

Example

1. A Nokia battery is 650 mAh
2. $(650 \text{ mAh} / 150) \times 1.2 = 5.2 \text{ hours}$
3. It would take a Nokia battery 5.2 hours to fully charge by solar power.

Notes

- Dirty solar panels will not allow for optimal operation. Clean the solar panels by wiping with a soft cloth and glass cleaner.
- Do not drop or abuse the charger. The solar panels can shatter.
- Recharging time will vary depending on exposure to sunlight and battery capacity.
- This product is only suitable for outdoor use. Indoor lighting is not capable of charging electronic devices or rechargeable batteries.
- The product is not suitable for mobile phone batteries over 4.8 volts.
- Do not leave product in the car for extended period of time on warm days.

Troubleshooting

- The LED light does not light up or is very dim when using solar power to charge electronics or batteries.
 - i. Ensure the solar panels are positioned for maximum sun exposure.
 - ii. Ensure the solar panels are not dirty. Clean the solar panels by wiping with a soft cloth and glass cleaner.
 - iii. The sunlight is too weak, ensure the solar panels are positioned for maximum sun exposure.
 - iv. Ensure that batteries can still carry charge.
- Electronic devices cannot be charged up.
 - i. Ensure batteries have full or sufficient charge.
 - ii. Ensure batteries are correctly placed in the battery case.

- iii. Ensure batteries are the same type and age. Do not mix batteries of different types (e.g. Alkaline and Li-Ion). Do not use old and new batteries together.
- Mobile phone does not work with charger when LED is on.
 - i. Ensure the proper adaptor is used and that the connections are secure.
 - ii. Ensure the mobile phone contains a chargeable battery.

Specifications

- Power at full sun: 1.38 watts
- Current by battery: 150mA (average)
- Output voltage by battery: 4.8 volts DC to 5.2 volts DC
- Weight without batteries: 5.6 oz (160 g)
- Product Dimension (folded): 4.5" x 2.625" x 1.25"
(11.5 cm x 6.75 cm x 3.5 cm)

☒ Please activate my limited warranty for WAGAN Corp.

Name	
Mailing address	
City	
State, Zip code	
E-mail address	
Item purchased	Item no.
Store name	
Date of purchase	
Signature	Date

All WAGAN Corporation Products must be registered within (30) days of purchase to activate this warranty. Mail the complete registration form, along with a copy of the original sales receipt to:

Attn: Customer Service
WAGAN Corporation
31088 San Clemente St.
Hayward, CA 94544

Detach and return left portion to the address above.

WAGAN Corp. Limited Warranty

All WAGAN Corporation products are warranted to the original purchaser of this product.

Warranty Duration: This product is warranted to the original purchaser for a period of one (1) Year from the original purchase date, to be free of defects in material and workmanship. WAGAN Corporation disclaims any liability for consequential damages. In no event will WAGAN Corporation be responsible for any amount of damages beyond the amount paid for the product at retail. In the event of a defective item, please contact WAGAN Corporation at (800) 231-5806 to obtain a Returned Merchandise Authorization number (RMA#), and return instructions. Each item returned will require a separate RMA#. After you have received the RMA# and the return instructions from WAGAN Corporation, please follow the instructions and send the item with PREPAID SHIPPING, along with all of the required documentation, a complete explanation of the problem, your name, address and daytime phone number. WAGAN Corporation will, at its option, replace or repair the defective part.

A Returned Merchandise Authorization number (RMA#) is REQUIRED when sending in any defective item. WAGAN Corporation is not responsible for any item(s) returned without an official Returned Merchandise Authorization number. The item(s) must be returned with prepaid shipping. WAGAN Corporation is not responsible for any shipping charges incurred in returning the item(s) back to the company for repair or replacement. This warranty is void if the product has been damaged by accident, in shipment, unreasonable use, misuse, neglect, improper service, commercial use, repairs by unauthorized personnel or other causes not arising out of defects in materials or workmanship. This warranty is effective only if the product is purchased and operated in the USA and does not extend to any units which have been used in violation of written instructions furnished.

Warranty Disclaimers: This warranty is in lieu of all warranties expressed or implied and no representative or person is authorized to assume any other liability in connection with the sale of our products. There shall be no claims for defects or failure of performance or product failure under any theory of tort, contract or commercial law including, but not limited to negligence, gross negligence, strict liability, breach of warranty and breach of contract.

Warranty Performance: During the above one (1) Year warranty period, a product with a defect will be replaced with a comparable model when the product is returned to WAGAN Corporation with an original store receipt. The replacement product will be in warranty for the balance of the one (1) Year warranty period.

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