

SHS1206

User's manual

Please read this before you use this product



1PCS



SOLAR
ENERGY
LIGHTING

=



+



+

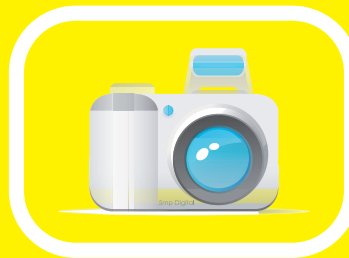
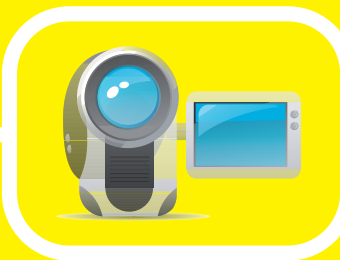
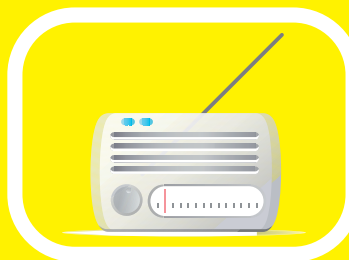
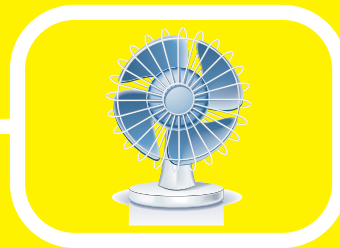
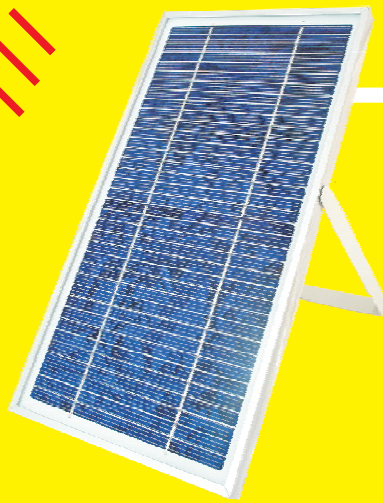


+



+





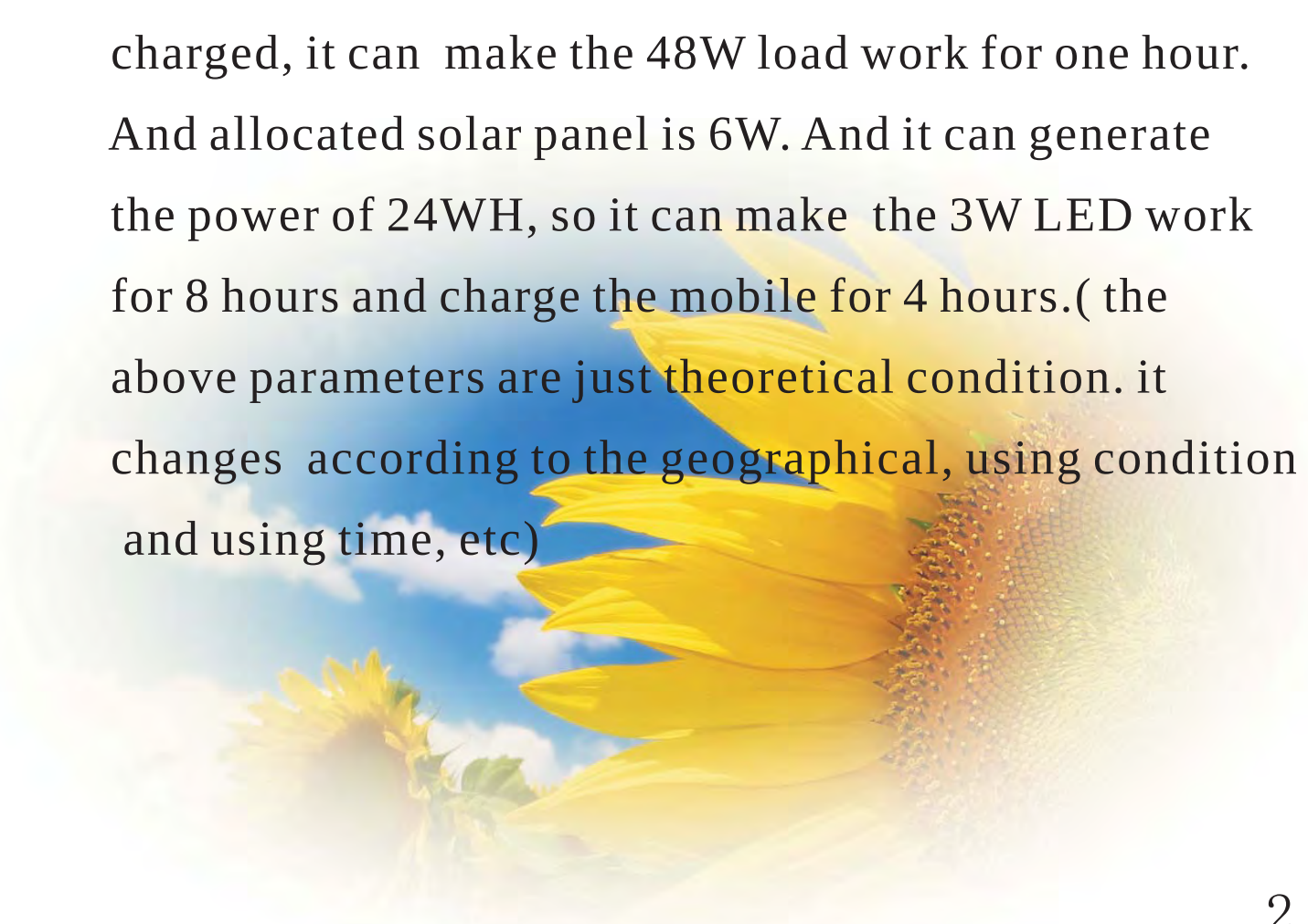
SOLAR DC SYSTEM

catalogue

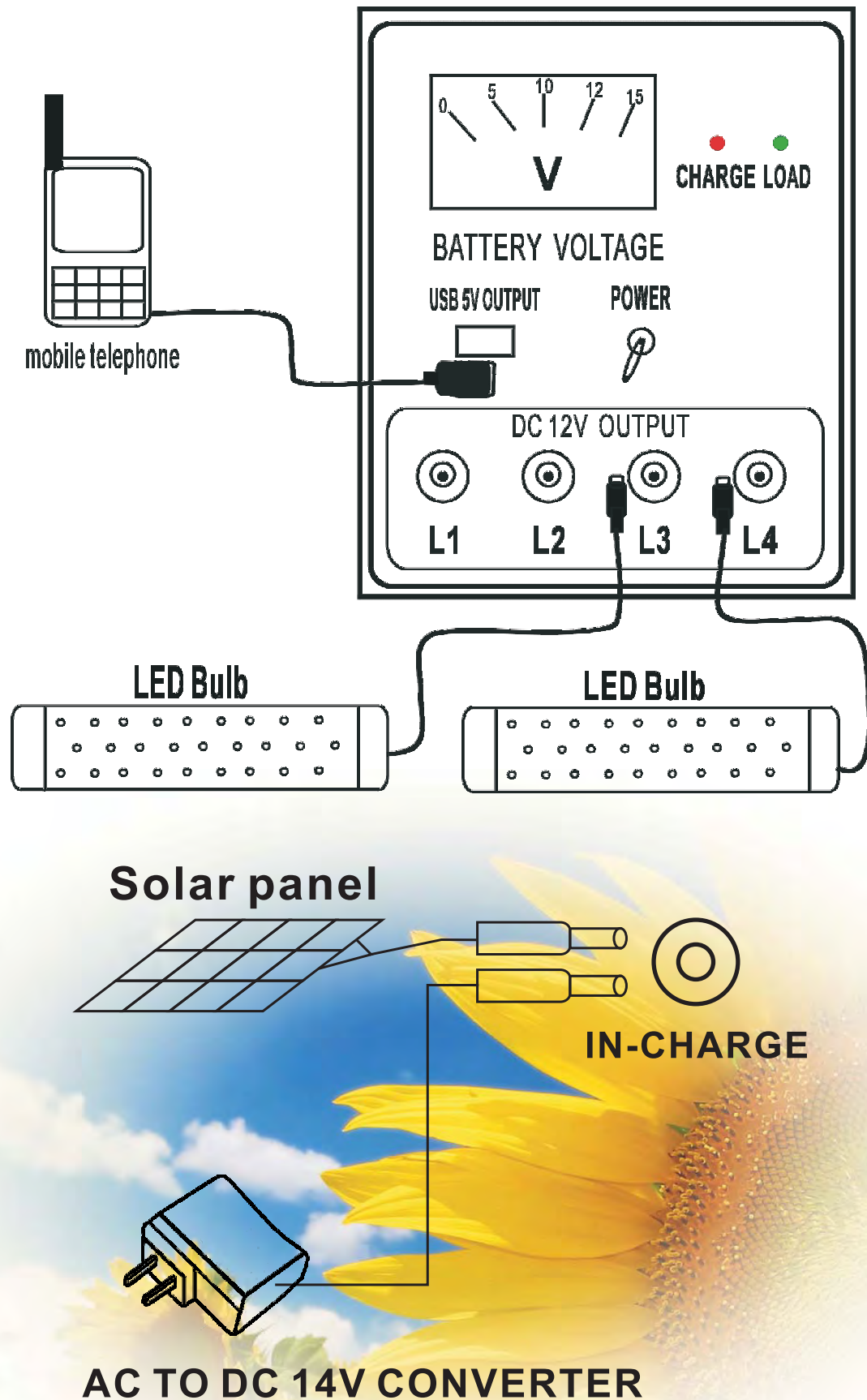
1. Safety: 2
2. Installing & operation: 3
3. Breakdown & disposal: 5
4. Maintenance: 6
5. Quality assurance article: 7
6. Certificate of quality: 8



1.Safety:

- 1.1 Avoid using the machine under such conditions as having flammable or explosive or erosive gas and too hot places.
- 1.2 The maximum charging power of this system is 15W, and maximum discharging power is 24W(the maximum output current of the USB is 500mA). Please check carefully before using the load.
- 1.3 The battery in the system is 4AH, and when it is fully charged, it can make the 48W load work for one hour. And allocated solar panel is 6W. And it can generate the power of 24WH, so it can make the 3W LED work for 8 hours and charge the mobile for 4 hours.(the above parameters are just theoretical condition. it changes according to the geographical, using condition and using time, etc)
- 

2.Installing and operation



- 2.1 Open the box and take out the accessory and machine. Put the solar panel outside and make it face the sun; connect the cable with the machine indoor; put on the switch. If the battery voltmeter has display and red charging indicator is on, it means the solar panel is charging the battery normally. (If this is the first time you use this machine, please charge for 3 continuous days and then discharge the load)
- 2.2 If the battery voltage is higher than 10.5V, the load indicator will be on. Then insert the LED lamp into the socket of the DC output on the machine. And insert the mobile into the USB connecting port.
- 2.3 This machine has anti-discharging function(prevent battery from discharging to solar panel), so please make sure the solar panel is always connected with the machine to assure the battery can get more power. If you use the battery for long, it would cause the battery to low voltage condition(load indicator off, no load output. The voltmeter showing at 10V). If this happens, please use the solar panel to charge the battery for 10 continuous hours and restart the machine to recover the power supply.
- 2.4 If the battery voltage is higher than 14V, the charging indicator begins to flicker, and it means the battery has been in float charging state.
- 2.5 We have fully considered the using condition of the users. The cables' length for solar panels and LED lamp are long enough, so please do not lengthen them or change them at random. But if you have to change them, please make sure the area of the cable connecting solar panel is not less than 0.5mm², while for LED lamp, not less than 0.3mm². All the connecting cables have negative and positive part, please distinguish them.

3. Breakdown and disposal

- 3.1 Solar panel indicator off: Please check whether the solar panel is facing the sun; whether the machine switch is on; whether the battery is in full capacity state; whether the connecting of the solar panel is short-circuit or reversed.
- 3.2 No load output and the load indicator off: Please check whether the battery is in low voltage, whether the voltmeter showing is less than 10V and if it so, please charge the battery for 10 continuous hours and then use it.
- 3.3 No load output, load indicator on:
Please check whether there is bad connection of the load, then connect again. Check whether the load is overloaded, short-circuit, and disconnect the load for 1 minute, then connect again.

4.Maintenance:

- 4.1 This system should be used indoor. Please do not expose the machine into sunshine and wet places. If there is water inside by accident, please turn off the switch and dry the water inside and then you can use it.
- 4.2 If you are going not to use this machine for long, please turn off the power switch and charge the battery every month (battery voltage higher than 14V.)
- 4.3 Please do not make the battery in the state of low voltage. Otherwise it will shorten the using time of the battery. After one time of low voltage, please charge over 2 days and then use it.



5. Quality Assurance

1. Quality assurance should be carried out according to the following rules:

- The product is guaranteed of replacement, returning and repairing within 7 days after sale.
 - The product is guaranteed of replacement and repairing within 1 month after sale.
 - The product is guaranteed of repairing within 12 months after sale.
2. If it is not possible to identify the using date of the controller, we would refer to the ex-work date, and prescribe 18 months as the warranty period. We need to charge beyond the warranty period. The controller can be repaired for life no matter when and where you use it.
3. If the controller is damaged by the following causes, we need to charge even if it is in the guarantee period:
- Do not operate according to the user's manual.
 - Use the controller under the condition which is beyond the using standard and technical requirements.
 - Repair by yourself or reform by yourself.
 - The inappropriate environmental condition which can cause the breakdown and aging of the apparatus.
 - Improper carrying or storage.
 - Regarding to the service of replacement, returning and repairing, you need to retreat the product to our company, and we decide whether to replace or repair after we make clear who should be responsible.

4. We will not note if there is any change of this product.

certificate of quality

Product name: 4AH DC solar power system

Model: SHS1206

Inspector:

Date of manufacture

Place of origin: China

This product is qualified after inspection in the factory.



SOLAR ENERGY LIGHTING

4AH DC power supply system SHS1206	Parameter
rated charging current	1A
rated discharging current	2A
rated working voltage	12V
solar panel voltage	$\leq 25V$
float charging voltage	14V
low voltage disconnecting point	10.5V
low voltage reconnecting point	11.5V
no load loss	$\leq 8mA$
USB port current	$\leq 500\text{ mA}$
working temperature	$-10^{\circ}C \sim 50^{\circ}C$
storage temperature	$-15^{\circ}C \sim 40^{\circ}C$
humidity requirement	$\leq 90\%$,no condensation

SOLAR ENERGY LIGHTING

