

Freeloader's aluminium skin and solar panels are protected during transit by a transparent film.
Remove the film before first use!

Free Loader

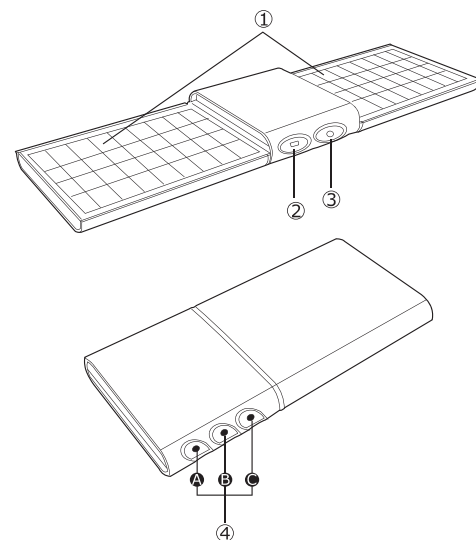
PORTABLE SOLAR ENERGY

User Manual

Portable Solar Energy

Models:
SC8088 (Grey)
SC8089 (Pink)

- We recommend that you charge your FreeLoader via USB for its first charge



1. Solar Panel
2. Power in (for USB charge cable)
3. Power out (for master cable)
4. LED Indicator
 - A. Solar charging indication LED
 - B. USB charging and discharging LED
 - C. Solar charging indication LED

.1.

Electrical Characteristics / Performance

1. Solar Panel (mono/multi crystalline): 5.5V 120mA
2. Rechargeable Lithium Battery: 3.7V 1000mAh
3. USB charging cable: 5V 500mA
4. DC Output: 5.5V+/- 0.5% 500mA
5. Time required to deliver power from FreeLoader: 30 minutes to 1 hour
6. Time required to charge the FreeLoader internal battery using the USB charge cable: 3 to 4 hours
7. Time required to charge the FreeLoader internal battery in sunny conditions using the solar panels: 5 to 10 hours

Note - light quality plays a key role in determining the speed of charge. Cloudy days or the FreeLoader being positioned behind a glass window will all increase the time needed to charge its battery.

Components Included:

- 1 x FreeLoader charger; 1 x USB charge cable
- 1 x Power Master cable; 1 x Adaptor for Nintendo DS Lite
- 1 x Adaptor for Motorola mobile phone
- 1 x Adaptor for LG Chocolate Series Phones
- 2 x Adaptors for Nokia mobile phones
- 2 x Adaptors for Samsung mobile phones
- 2 x Adaptors for Sony Ericsson mobile phones
- 1 x 4mm jack plug for PSP, Tom Tom, digital camera etc
- 1 x USB 2.0 Female socket cable for iPod, PDA's etc
- 1 x Mini USB adaptor for Motorola RAZR, Blackberry etc

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Operation Instructions:

1. To charge using the USB charge cable

Insert the USB plug into a desk top PC, lap top or other suitable device which is switched ON. Insert the other end of the cable (mini USB) into FreeLoader's body. The central LED (B) will turn red. Once fully charged the LED will turn green and the USB charging cable should be removed.

Note - do not leave the USB charge cable plugged in overnight as damage to the battery may occur.

Do not charge using USB whilst delivering power to a devise at the same time.

Important - This method of charging is recommended for the first charge from new and may take up to 8 hours

2. To charge from the solar panels

Remove the clear film from both solar panels before first use. Detach the solar panels from the body of FreeLoader and separate the two halves exposing the face of each solar panel. The end of the solar panel that has the two locating lugs should then be inserted into the side of FreeLoader's body – one solar panel each side.

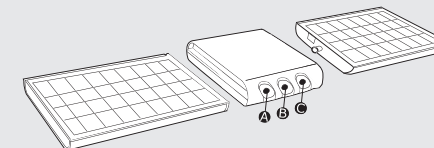
When the solar panels are facing the sun, the two LED's (A and C) will turn red. The brighter the light, the faster the charge.

Note - be careful not to scratch the surface of the solar panels and do not clean with strong detergent.

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KEY TO LED DISPLAYS			
LIGHT A	LIGHT B	LIGHT C	EXPLANATION
RED	OFF	RED	Charging form solar panels
OFF	RED	OFF	Charging from USB or sending charge to mobile divice
OFF	GREEN	OFF	Fully charged from USB

Please note: There is no indication to confirm that FreeLoader is fully charged when using the solar cells to charge, but prolonged exposure of FreeLoader to sun/daylight will not damage the battery because of its in-built advanced charge control electronics.



3. To charge hand held electrical devices

Insert the male end of the Master cable into the female socket on FreeLoader's body. Select the correct adaptor tip, insert into the female end of the Master cable and connect to your device. The central LED (B) will turn RED. Once FreeLoader's battery is empty the LED will switch OFF.

Warning

1. Keep FreeLoader's body away from fire, water and any form of moisture to ensure damage and injury do not result.
2. Any sever shock or impact may result in damage and will invalidate the warranty.
3. It is forbidden to dismantle FreeLoader except by Solar Technology personnel or agents appointed by Solar Technology. Any sign of tampering will result in the warranty being invalidated.

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Warranty

FreeLoader is supplied with a 12 month warranty, excluding the battery. Should a failure occur during this time Solar Technology International Ltd will repair or replace any faulty part, at its discretion.

Solar Technology International Ltd does not accept liability for any 3rd party damage how so ever caused or any costs associated with the return postage of faulty products.

To make a warranty claim please telephone Solar Technology International Ltd on +44 (0) 1242 210100.

These warranty conditions in no way affect your statutory rights. A full set of Solar Technology International Ltd terms and conditions are available on request.

Optional Accessories

Solar Technology International Ltd provide a comprehensive range of accessories for FreeLoader, which is constantly being updated as new devices come onto the market.

Our accessory range covers the following: Spare FreeLoader battery, AA/AAA Battery Charger; In car charge adaptor; Mains charge adaptor; Carry pouch for FreeLoader and connectors plus over 20 additional connection tips.

Please contact your retailer for the full range or go to www.solartechnology.co.uk

Disposal of used FreeLoader’s battery

Please dispose of FreeLoader’s battery responsibly. Should you be unable to find a suitable waste disposal unit for the battery, please return this in a sealed plastic bag, contained in a padded envelope to Solar Technology International Ltd.

Frequently Asked Questions

1. My FreeLoader has been outside, in the sun but when I connected it to my device, it only charged for a short time and did not deliver much power?
- Please ensure the first charge is given by the USB cable.
 - Please make sure you have removed the protective film from the solar cells as this will radically reduce the effectiveness of the cells.
 - Please ensure FreeLoader is given exposure to sunny conditions for between 5 to 10 hours.
 - Ensure the FreeLoader is outside, facing south, in an un-shaded position and ideally tilted at a 45 degree angle.
 - If FreeLoader is connected to a device that has a near full battery (if for example you were testing FreeLoader from new), FreeLoader would, potentially, not deliver power because if the battery in the device has more or equal power than the FreeLoader, FreeLoader will not be able to deliver power. Wait until the device to be charged is 50% to 60% full.
2. How do I know when the FreeLoader hub is fully charged and can I use the power from FreeLoader even if it’s not fully charged?
- There is no indication FreeLoader gives when its battery hub is fully charged from the solar cells. However, this is not strictly necessary because FreeLoader will deliver power whatever state of charge is in its battery hub except if the hub is completely empty.
3. What performance I can expect from FreeLoader?
- After 1 day in full sun (9am to 6pm) the FreeLoader hub will be pretty much fully charged. When connected to your device it will deliver power for 20minutes to 1 hour depending on the device.

- If FreeLoader is positioned behind a window, again facing south for a 1 day charge in full sun conditions the time needed to fully charge FreeLoader’s battery will be up to 3 days. The reason for this increase in time is that most glass incorporates UV filters, which naturally reduce the amount of irradiation needed to enable solar panels to operate effectively.
 - In cloudy conditions, FreeLoader may take approximately 1 1/2 times longer to charge than the above mentioned times, but this is depending on the time of year, density of cloud etc.
4. Can I charge my FreeLoader hub whilst at the same time powering a device?
- No. If FreeLoader’s hub is empty you will not be able to simultaneously charge and deliver power. The reason is that FreeLoader delivers power to a device approximately 10 times quicker than its solar cells can charge up its hub.
5. Will charging FreeLoader from its solar cells behind glass cause me any problems?
- Not really a problem but it will increase the time needed to charge the hub sometimes up to three times longer than if outside.
6. I have FreeLoader positioned on a shady windowsill. Will the FreeLoader still charge?
- Yes the FreeLoader will still be charged by its solar cells but it will take a lot longer compared to being outside in full sun - up to 4-5 days longer in fact.

7. Can I leave the FreeLoader out in the rain?
- No we do not recommend getting the FreeLoader wet, however, should this happen accidentally, please dry both hub and cells in a dry airy position away from children and food stuffs. The solar cells should be fine; however, the hub / battery may be unsalvageable. A trial will soon tell, however, we would recommend this trial be done outside by the solar cells only and NOT the USB charge cable. If the hub will not work a new one can be ordered from www.solartechnology.co.uk
8. How do I connect FreeLoader to my iPod as I don’t seem to have a connector in the FreeLoader pack that fits the iPod?
- To connect up an iPod please use the original sync cable (the cable you use for connecting the iPod to a PC) and connected it to the female USB connector tip supplied with the FreeLoader. Or you can purchase the FreeLoader iPod connector part number SCA002.
9. I have a device that can be charged via my computers USB port can the FreeLoader charge it?
- Yes the FreeLoader should be able to charge it.
10. Are there any devices that FreeLoader cannot power?
- FreeLoader has a voltage range of 3v to 5.5v, so any device that needs a higher voltage such as a lap top or video camera is outside the range of FreeLoader.
 - If we have no connection tip (see www.solartechnology.co.uk for the list of accessory tips), then FreeLoader will not be compatible.
 - Digital camera’s where the battery of the camera needs to be removed and inserted into a cradle to charge are not compatible with FreeLoader.

Solar Technology International Ltd

We are manufacturers of some of the worlds most advanced solar energy products from solar toys to full scale industrial solar modules. To find out more please visit www.solartechnology.co.uk

If you have any questions about this product or regarding these instructions please contact the Solar Technology International Technical Help Line on +44 (0) 1242 210100 or alternatively please write to:

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WE WANT YOUR PICTURES!

We are seeking images of you and your FreeLoader in action in the weirdest and most wonderful places around the world. For every picture we publish on our web site you will receive a complimentary FreeLoader Battery/Hub worth £12.99.

Please email your images to sales@solartechnology.co.uk and don't forget to include your mailing address.

Note: We cannot guarantee to publish every image received - the final decision to publish or not will be made by Solar Technology International Ltd. By sending the image the sender automatically grants Solar Technology International Ltd approval to use the image for any future use in marketing its FreeLoader product.