

# Hybrid Solar Charger

## Owner's Manual

Thank you for purchasing our product. Please read this manual carefully. It contains important operating instructions. This unit is specially designed for recharging your AA Ni-MH batteries from the SUN energy or from a computer via USB cable. Also, it can be used to power up your USB devices with safe.

### Standard Accessories:



### Other Accessories: (option)

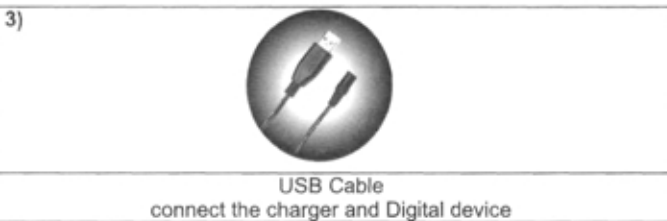
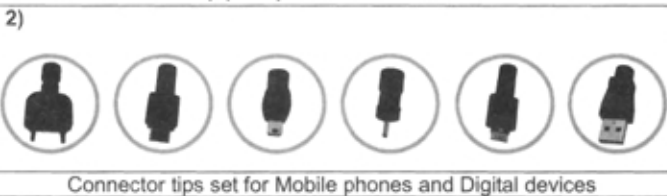


Fig. 1

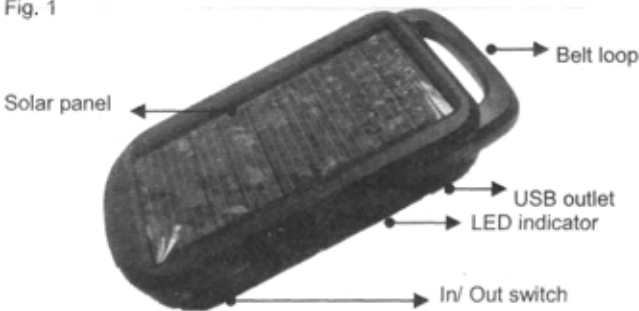
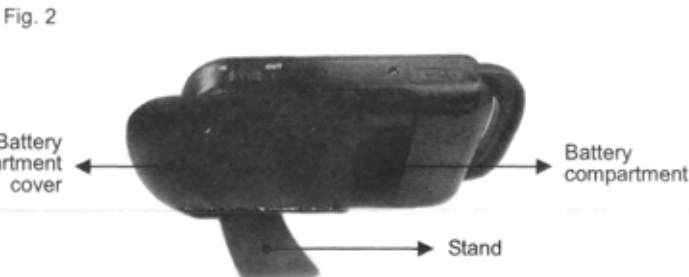


Fig. 2



### Warning :

- Charge **only** Ni-MH type batteries on this charger.
- Batteries (if included) may leak or explode causing personal injury if inserted improperly, disposed of in fire, mixed with other battery types, or short circuit.

### Features :

- In : As a charger – recharge your 2 x AA Ni-MH rechargeable batteries from
  - a Laptop/PC or any power supplies with an USB outlet.
  - the SUN energy by Solar panel
- Out : As an emergency charger – power up your Digital device by 2 AA Ni-MH rechargeable batteries.

### Charging Instructions (For charging 2 x AA Ni-MH batteries)

1. Insert 2 pieces of AA rechargeable Ni-MH batteries into the battery compartment [see Fig.2].
2. Make correct contact for polarity ( + and - ) ; according to the sign in the battery compartment.
3. Slide the "switch" [see Fig. 1] to select "IN" to turn on the charger. The charging function won't be operated when "OUT" is selected.
4. **Recharge the batteries by USB Power**
  - Use the supplied USB cable and the "USB connector" tip to connect the charger into the USB port of your operating computer/ Laptop or any USB power adaptor by the USB cable.

### Charging time from USB power

Size	Charging current	Ni-MH	Charging time
AA	180mA	2100mAh	12 hours
		2300mAh	13 hours
		2500mAh	14 hours

\*Charging time will vary depending upon the brand, capacity and condition of batteries being charged.

### Recharge the batteries by SUN Energy

- Face the solar panel to the sunlight and the batteries will receive charge

### Charging current from SUN Energy for 2 x AA

Size	Charging current
AA	20-90mA*

\*20-90mA depends on level of the Sun Energy

### Charging time from SUN Energy

Size	Charging current	Ni-MH	Charging time
AA	90mA	2100mAh	24 hours
		2500mAh	28 hours

5. The RED LED [see Fig. 1] will light up instantly to indicate the proper charging..
6. Observe the charging time. Unplug the charger and remove the batteries from the charger when not in use.
7. Begin again at Step 1 to charge the next set of batteries.

### Charging your USB devices (with 2 x AA rechargeable Ni-MH batteries)

1. Before using, check the USB device's input voltage and the charger's output voltage if they can match. Make sure the total loading does not exceed the rated output current of the charger.
2. Slide the "switch" [see Fig. 1] to select "OUT" to turn on the output function.
3. The GREEN LED [see Fig. 1] will light up instantly to indicate the USB socket is ready for use.
4. Insert 2 pieces of AA rechargeable Ni-MH batteries into the battery compartment.
5. Choose the suitable connector tip (from the supplied connector tips) and the supplied USB cable to connect the charger and your digital device.
6. Set the switch at "IN" position when the USB outlet is not being used.

### Important Safety Instructions

1. Before charging, read instruction.
2. This charger is intended for use with Nickel-metal-hydride rechargeable batteries only. Attempting to charge other types of batteries may cause personal injury and damage to the charger.
3. Do not charge non-rechargeable batteries.
4. Please do not mix different type and capacity of batteries when charging.
5. Do not short circuit the output terminal.
6. Do not attempt to open this unit.
7. Remove the batteries when not in use.
8. Always turn off the Digital device before you connect/ disconnect the charger.

USB-5000