



# SOLARCHARGER 1200

Operating Instructions

**IMPORTANT!** Please read the instructions before operating.

• When working around batteries and other electrical equipment, please observe industry standard and manufacturer's safety procedures.

• Make connections in a well-ventilated area free from flammable gases or vapors.

• For 12V systems, ALL connections should be in PARALLEL: Positive (+) to Positive (+), Negative (-) to Negative (-).

• DO NOT attempt to recharge NON-RECHARGEABLE batteries.

• Always CONNECT the charge controller to the battery FIRST.

• When disconnecting your solar panel DISCONNECT the battery LAST.

## PRODUCT DESCRIPTION

**SolarCharger 1200:** Solar powered battery charger 1200mA, 15V (18W)

**Standard accessories included in all kits:** (see FIG. 1)

- (1) Extension power cable (10ft.)
- (2) Panel-to-panel jumper cable (1ft.)
- (3) O-ring connector wire (1.5ft.)
- (4) Battery clamp wire (1.5ft.)
- (5) Male CLA adapter cable (1.5ft.)
- (6) Female 12V socket cable (1.5ft.)
- (7) Bare wire adapter (for connecting to charge controller)
- (8) Two (2) wire twist connectors
- (9) Stainless mounting screws (4)
- (10) Center legs with screws (2)

\*Charge Controller (model SE-1201 only)  
CC-10000 – overcharge protection up to 10A

**Important Note:** We highly recommend using a Sunsei™ Charge Controller with the SolarCharger 1200 because it will protect your battery from overcharging and will optimize the charging process. If the vendor from whom you have purchased this solar panel does not carry Sunsei™ Charge Controllers, please visit [www.sunseisolar.com](http://www.sunseisolar.com) for a dealer near you.

## STEP 1 – TESTING THE PANEL

Press the sun-shaped button. The LED will light up when the panel receives sufficient daylight to produce power (see FIG. 2).

## STEP 2 – INSTALLATION

Position the solar panel where you would like it to be permanently installed. Angle the panel in such a way that it will be perpendicular to the strong midday sun (straight up in most cases), between 10 a.m. and 2 p.m. Insert the center legs at the bottom of each aluminum frame (see FIG. 3). Insert each mounting screw and tighten carefully. Do not over-tighten (see FIG. 3).

## STEP 3 – CONNECTION

**Note:** Remove the connector caps before connecting the cables.

First, connect the GREY plug of the 10-foot extension cable to the connector of the solar panel. Then, connect the charge controller to your battery. (For more details concerning the operation of the charge controller, consult the instructions included with the charge controller.) Connect the cable of your choice to the battery (see FIG. 4). Finally, connect the other end of this cable with the BLACK plug of the extension cable.

FIG. 1 – Panels and accessories

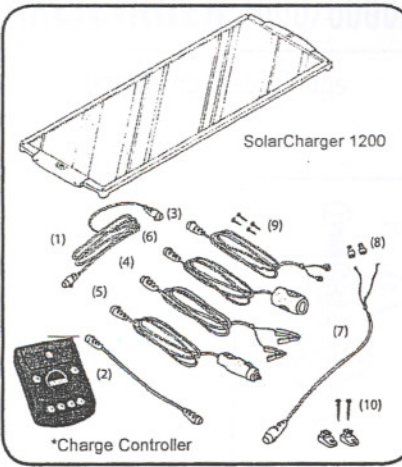


FIG. 2 – Testing the unit

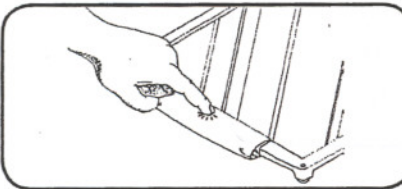


FIG. 3 – Mounting the SolarCharger 1200

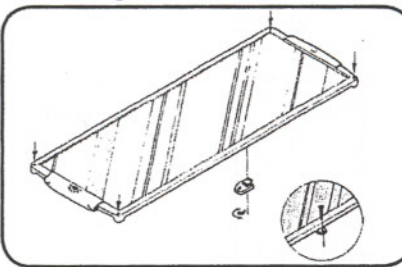
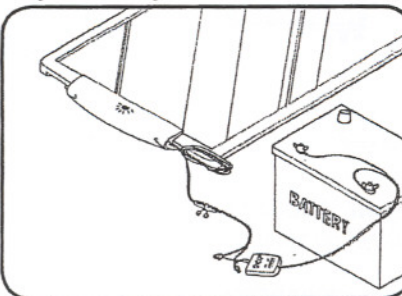
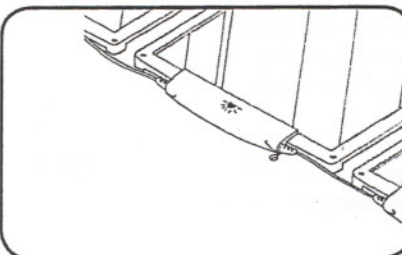


FIG. 4 – Completing the connection to your battery



## MULTI-PANEL CONNECTION

If you have more than one Sunsei™ SolarCharger panel, simply interconnect the panels using the jumper cable.



## FREQUENTLY ASKED QUESTIONS (FAQ)



**Q1:** What types of batteries can I charge?

**A:** You can charge all types of 12V batteries with the SolarCharger 1200, including lead-acid automotive batteries, deep cycle (traction type) batteries, gel-cell batteries and heavy-duty (stationary type) batteries.

**Q2:** How long will it take for the SolarCharger 1200 to charge a dead battery?

**A:** The SolarCharger 1200 can recharge a depleted battery. It will supply the battery with 1.2A per hour in the sun. Therefore, depending on type of battery and the conditions, a battery that requires 30AH for full charge would take approximately 25 hours of full sunshine to recharge. You can use multiple panels in order to decrease the total charging time.

**Q3:** Do I need a charge controller with the SolarCharger 1200?

**A:** Yes. It is important to use a charge controller with the SolarCharger 1200 to protect your battery from overcharge.

**Q4:** Can the SolarCharger 1200 drain my battery at night?

**A:** No. All Sunsei™ solar panels are equipped with a built-in diode that prevents any reverse current.

**Q5:** Can the SolarCharger 1200 be left outdoors without protective covering?

**A:** Yes, these panels have been weather protected and can be mounted outdoors. They are completely weatherproofed, and can withstand 1/2 inch hailstones, up to 180°F heat, and operate under 3 inches of snow (on sunny days).

**Q6:** Can I mount the SolarCharger 1200 directly to a surface or do I need to use some sort of bracket?

**A:** The SolarCharger 1200 can be installed directly to a flat surface, using the screws and center legs provided.

**Q7:** Do I have to disconnect the panels from the battery when I drive or while I am recharging my battery with my generator?

**A:** No. Sunsei™ solar panels are designed to be connected to the battery permanently. There is no need to disconnect them when charging the batteries by other means such as AC chargers or your vehicle's generator or alternator.

## WARRANTY

ICP Solar Technologies grants the original purchaser of the Sunsei™ SolarCharger 1200 a 10-year warranty on the power output and a 2-year warranty on the materials of the module. ICP guarantees that the unit will produce a minimum 80% of its original minimum power rating for the Warranty Period from the purchase date. ICP warrants the module to be free from defects in materials and workmanship under normal applications, installation, use and service conditions for the Warranty Period from the purchase date. ICP will, at its option, either repair or replace the product if it becomes inoperable due to a defect in material or labor during the Warranty Period. This warranty does not cover installation or costs derived thereof. ICP shall not be responsible for any costs due to removal, shipment, re-installation or any other loss due to warranty servicing. The maximum liability to ICP under this warranty shall not exceed the purchase price of this product. This warranty does not cover any module that has been damaged by misuse, neglect, improper installation or acts of God, including lightning, floods, earthquakes, fire and high winds. This warranty does not cover accessories included with the product. This warranty does not cover product that is broken after purchase. ICP shall not be responsible for any damage to persons or property caused by improper installation, misuse or improper handling of this product. Some states do not allow exclusion or limitation of accidental or consequential losses so the exclusions may not apply to the purchase. This warranty gives you specific legal rights and you may have other rights, which vary from one state (or province) to another. Please note that ICP will not accept returns without prior authorization. The original proof of purchase is required for warranty validation.

**Warranty for accessories:** A 2-year warranty is given on accessories such as, but not limited to, cables included with the product. The warranty applies from the original purchase date.

## APPROXIMATE CHARGING TIMES

(in hours full sunlight) for batteries 50% discharged

BATTERY SIZE	SE-1200 / SE-1201*
U1 (40AH)	17
Group 24 (80AH)	33
Group 27 (100AH)	42
Group 31 (120AH)	50
4-D (180AH)	75
8-D (220AH)	92
Golf cart (220AH)	92
L-16 (400AH)	167

\* with charge controller

## SolarCharger Product Information Chart

	SE-1200 / SE-1201	SE-4000	SE-6000	SE-8000
Operating voltage	15V	16.5V	16.5V	16.5V
Maximum current	1200mA	4A	6A	8A
Open circuit voltage	21.5V	21.5V	21.5V	21.5V
Dimensions	100 cm x 35 cm x 3 cm	104.1 cm x 50.8 cm x 3.6 cm	127 cm x 59.4 cm x 3.6 cm	153.2 cm x 71.1 cm x 3.6 cm
Weight	9.5 lbs / 4.3 kg	15 lbs / 6.8 kg	22 lbs / 10 kg	30 lbs / 13.6 kg

Register your warranty online and enter to win an ICP Solar product. [www.icpsolar.com/warranty](http://www.icpsolar.com/warranty)

Need help?  
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