



SOLARCHARGER 400

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 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.
- When disconnecting your solar panel DISCONNECT the battery LAST.

PRODUCT DESCRIPTION

SolarCharger 400: Solar powered battery maintainer 400mA, 15V (6W)

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) Two (2) wire twist connectors
- (8) Stainless mounting screws (4)

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 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. 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.

Looking for an alternative mounting option?



Get the **Sunsei™ SolarGrip™**. No need to drill your deck or roof!

FIG. 1 – Panels and accessories

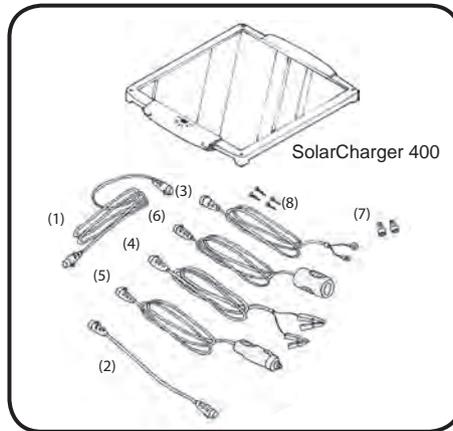


FIG. 2 – Testing the unit

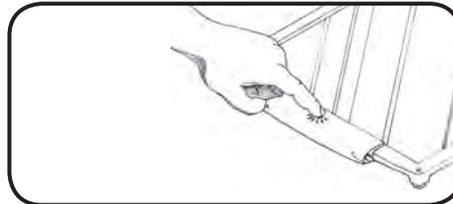


FIG. 3 – Mounting the SolarCharger 400

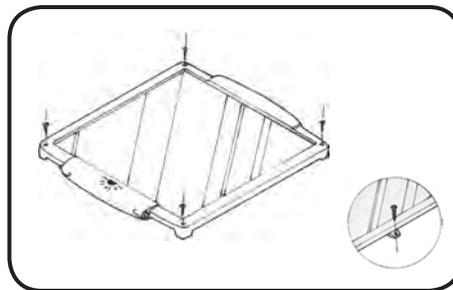
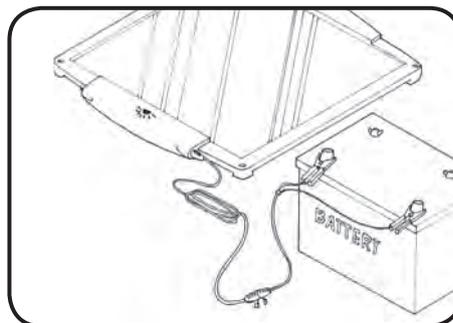
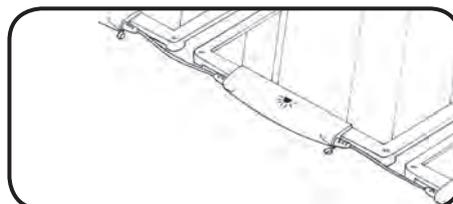


FIG. 4 – Completing the connection to your battery



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 trickle charge all types of 12V batteries with the SolarCharger 400, 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 400 to charge a dead battery?

A: The SolarCharger 400 is designed to trickle charge batteries. It compensates for natural voltage losses and key-off small instrument drain by replenishing your battery.

Q3: Do I need a charge controller with the SolarCharger 400?

A: No, a charge controller is not required for the SolarCharger 400 because it is not powerful enough to overcharge your battery.

Q4: Can the SolarCharger 400 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 400 be left outdoors without protective covering?

A: Yes, the SolarCharger 400 has been weather protected and can be mounted outdoors. It is completely weatherproofed, and can withstand ½ inch hailstones, up to 180°F heat, and operate under 3 inches of snow (on sunny days).

Q6: Can I mount the SolarCharger 400 directly to a surface or do I need to use some sort of bracket?

A: Sunsei™ solar panels can be installed directly to a flat surface, using the screws provided.

Note: SolarCharger 400 is compatible with the Sunsei™ SolarGrip™ (not included). Provides alternative mounting options (no need to drill your deck or roof) and rotates 360° for double the solar power.

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 400 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.

Model: SE-400

Power: 400mA, 15V (6W)

Dimensions: 37.5 cm x 36 cm x 2.6 cm

Weight: 3.3 lbs / 1.5 kg