**Portable Solar Kit**

This Solar Kit with up to 5A charge current is very powerful for mobile applications. The car can be placed in the shade while the solar system keeps your appliances powered up. For easy and flexible usage the solar regulator integrated within solar kit. With the Car Connection Kit Cc4 the solar kit is transferable from vehicle to vehicle for emergency charge request.

Place solar kit in the way the sun hits the surface in a vertical angle, both cells have to line up. Best is to lean it against a bumper, camping chair, etc.

Performance is increased up to 50% if the solar panel is redirected to the sun 1 to 2 times per day.

**Energy production and consumption**

The solar kit generates 3-5A per hour depending of location of the globe, season, temperature and if it is directed correctly into the sun. On an average day (8 hours) it generates approximately 3A*8h=24Ah (Energy per day in)

A compressor fridge has as example a consumption of 1A over 24hours: 1A*24h=24Ah (Energy per day out)

In this calculation sample energy consumption is compensated by solar kit. Thus set up extends your camping time to several days without the need to start the engine.

**Consumption of appliances**

- Laptop: approx 80-120W, 10A*2h=20Ah
- Water pump: 20W, 2A*0.5h=1Ah
- LCD TV with inverter: 60W, 6A*4h=24Ah
- Hammer drill with inverter: 400W, 40A*2h=80Ah
- Fluorescence Light: 20W, 2A*4h=8Ah
- Air compressor: 24A*0,25h=6Ah

**Transportation**

Use carry bag with metal frame for safe transportation. Avoid hitting the glass with heavy or sharp parts. Solar kit is very rugged but good fixation for transportation is still essential.

**Accessory**

Cc4: Car Connection kit with battery clamps + and -
Ec4: 4m Cable extension
Installation Instructions

The Solar regulator is set to fixed charge voltage with blue sense wire (within junction box of solar panel). No temperature compensation required while solar regulator is within solar panel.

The lead from the solar plug (IP66) with flange to be shortened just to the length required. Install a 15A fuse close to the battery to protect wiring.

Automotive plug system is IP66 what is water proof, contacts are corrosion free material. Check always correct positon to mate plug, Pin1: GND, Pin2: +Battery

For Morningstar Sunkeeper6 installation instructions use original manual.

LED information:
Green LED: 3 times flashing for correct installation
Green LED: on during full charge mode
Green LED: fast flashing for absorb on/float mode
Red LED: flashing failure, check Morningstar manual
Red LED: on critical failure, check with manual
No LED: during right

General Information

In vehicle application the installation of a IBS Dual Battery System is recommend. Start priority is maintained and if excess charge from the auxiliary battery is available also the starter battery is automatically charged.

The new IBS LBP8 or LBP16 Low Battery Protection with micro controller and solid state technology protects the batteries from deep discharge. State of the art electronic short circuit detection offers maximum protection for your installation.

For mobile AC power the IBS Ultra Sine Inverter (150/300/500/800W) offer highest reliability even if things are going very rough.

This warranty shall not apply to any product which has been subject to any misuse, negligence and accident or has been used (or opened, broken seal) for any other purpose than was designed.

2 year: Installation done by an IBS approved auto electrician,
2 year: Other installations.

Applications

Specifications

Solar cells: Kyocera
2x43Wp
System voltage
12V
Solar charge current
5A DC max
Solar regulator Sunkeeper 6
6A DC max
Charge mode solar regulator
bulk, absorption, float
Max charge voltage
13,4-13,9V DC
Weight solar kit SK4
11,5kg
Batteries supported
Acid/Deep Cycle
Plug system IP66
Canon Automotive
Carry Bag
Hi-strength marine type

Wires:
red: Battery Plus +
black: Battery Minus -

Protection Solar Regulator:
- against wrong polarity
- against overload

Wiring IBS Dual Battery System

![Wiring Diagram](image-url)