

# 2 WATT SOLAR 12 VOLT BATTERY MAINTAINER



User's Manual

Congratulations on your Coleman® solar product purchase. This product is designed to the highest technical specifications and standards. It will supply years of maintenance free use. Please read these instructions thoroughly prior to installation, then store in a safe place for future reference.

# 2 Watt Solar 12 Volt Battery Maintainer

Specifications and Included Items:

Power Rating: Up to 2 Watts - Maximum rating – Under optimum conditions. Current: 133 mAmps @ 15Volts. Includes: Solar panel Alligator Battery Clamps

12 Volt DC plug

## Warning

• Avoid Electrical Hazards when installing, wiring, operating, and maintaining your Solar Module. The solar module included generates DC electricity when exposed to sunlight or other light sources.

- For use in 12 Volt systems only.
- Observe proper polarity throughout entire power cable wiring route.
- Work Safely. Do not wear jewelry when working with electrical or mechanical equipment. Use protective eyewear when working with batteries or drills. Use extreme caution when on ladders or on a roof.

• Follow all Safety Precautions of the battery manufacturer. Some batteries can release flammable hydrogen gas. Do not produce sparks when working in locations where flammable gases or vapors exist. Shield skin and eyes from battery acid. Wash thoroughly with water if skin or clothing come in contact with acid or any corrosive matter, which may have accumulated on the battery. Keep the terminals and casing clean.

- Use a Charge Controller for wattages above 15 Watts.
- Do not attempt to charge non-rechargeable batteries.
- Always connect charge controller to battery first.
- When disconnecting, always disconnect battery last.

#### Features

- Quick connect and disconnect to the battery.
- Overcharge and discharge protected.
- No direct sunlight needed, will work in cloudy conditions.
- Five year warranty.
- Extension cable included.
- Maintenance free and lightweight compact design.

## **Operating Instructions**

For optimal power, ensure the panel (solar cell up) is directly facing the sunlight.

#### Installation

The 2 Watt Solar Battery Maintainer may be installed using either the included 12 Volt DC plug or the alligator battery clamps.

#### Installation through 12 Volt DC Plug:

The 12 Volt DC plug is for connecting the Solar Battery Maintainer to the vehicle battery through a 12 Volt socket. Plug the "Quick Connect" end of the 12 Volt DC plug into the Quick Connect of the solar panel then insert the plug into the 12 Volt DC socket in vehicle. Make sure both ends are secure and aligned correctly.

#### Installation to Battery by Alligator Battery Clamps:

The alligator battery clamps are for a direct connection to the vehicle battery terminals. Plug the "Quick Connect" end of the alligator battery clamps into the Quick Connect of the solar panel then connect the

alligator clamps correctly by matching the red clamp which is Positive (+) to the Positive (+) terminal of the battery. Connect the black Clamp which is Negative (-) to the Negative (-) terminal of the battery.

## Mounting With Suction Cups to the Windshield: (If included)

Insert the 2 suction cups into the predrilled ends of the solar panel. Make sure they are secured properly in the panel. Choose a location preferably facing the sunlight and attach to the windshield or other glass surface. For best results, ensure windshield is dry, clean, room temperature and slightly lubricate the suction cups before mounting. Lubricants may include saliva or Vaseline.

## **Maintenance Instructions:**

Cleaning of the glass may be performed by the user by utilizing a clean, damp cloth. Any other maintenance to the unit should be performed by qualified service personnel or contact our experienced customer service team.

## NOTE:

This Solar Battery Maintainer has a built in blocking diode to prevent reverse discharge. The use of this panel is not recommended while vehicle is in use. When operating your vehicle it is best to secure the Solar Battery Maintainer in the glove box or under the seat.

## FAQ

#### What type of batteries does this panel maintain?

All rechargeable 12 Volt batteries, like those used in cars, boats, RV's, and motorcycles.

#### Do I need a Sunforce charge controller?

No, a solar battery charge controller is only needed for panels of 15 Watts or greater.

#### Can I start/drive my vehicle while the unit is connected to the battery?

No, for safety reasons, please make sure the panel is not in use while you are using your vehicle.

## How do I know if the panel is working?

To measure the voltage of the panel use a voltmeter. The voltage reading should be between 16 and 23 Volts DC in full sun.