# 2.4W SOLAR MAINTENANCE CHARGER









Manufactured and packaged for SRGS PTY LTD ABN 23 113 230 050 751 Gympie Road, Lawnton, Queensland 4501, Australia

## 2.4W SOLAR MAINTENANCE CHARGER

**Owners/Instruction Manual** 



#### 1. SAFETY/WARNING

- Before using the SCA solar maintenance battery chargers ensure the instructions have been read and understood.
- The SCA solar maintenance battery chargers are not intended for use by young children or infirm persons. Please keep away from pets.
- SCA solar maintenance battery chargers are designed to charge most 12 volt battery types including: Lead-acid, Deep-cycle, Calcium, Gel and Absorbed Glass Matt (AGM) batteries.
- Always wear the appropriate Personal Protective Equipment (PPE) when working near batteries. This includes gloves and eye protection.
- For maintainable batteries it is advisable read the operation manual before charging.
- Ensure battery is being charged in a well-ventilated area. Explosive gases may escape from the battery during charging. Never charge a battery in a closed off space or in an area without ventilation.
- Never smoke, use an open flame or create sparks near a battery or charger whilst charging as gases may cause explosion. Please keep burning cigarettes, flames or other ignition sources away from the charging battery at all times.
- SCA solar maintenance battery chargers are not water resistant or waterproof. Do not expose the battery charger to water or liquids.
- Do not attempt to use the battery charger if the cables or plugs are damaged. These units do not contain serviceable parts. To avoid a hazard ensure that any damage to the unit, cable or plugs are replaced by the manufacturer or service agent/ qualified technician.
- Do not disassemble the SCA solar maintenance battery charger. The warranty will be void if this instruction is ignored.
- If battery is still connected in the vehicle, ensure vehicles ignition is switched off before charging the battery.
- Do not place the SCA solar maintenance battery charger where it is not able to get adequate ventilation. Do not place on fabric/leather/vinyl seats, on the battery or balanced in the engine bay.
- Never charge a frozen battery, non-rechargeable, lithium or dry cell battery.

## 2. FIRST AID

- For advice, contact the Poisons Information Centre in Australia (PH: 13 11 26) or the National Poisons Centre in New Zealand (PH: 0800 764 766)
- If battery acid makes contact with the skin or clothing, wash immediately with soap and water.
- If battery acid makes contact with the eyes, hold eyelids apart and flush the eye continuously with fresh running water for at least 15 minutes or until the Poisons information centre advises you to stop.
- If battery acid is swallowed, <u>do not</u> induce vomiting. Drink a glass of water and seek medical assistance.

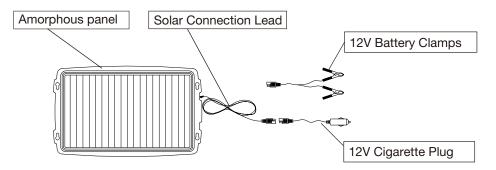
#### 3. FEATURES

- Amorphous solar panel
- Suitable for maintaining 12 volt batteries
- Protects 12 volt batteries from discharge during storage from the radio, clocks and other accessories
- Ability to trickle charge in cloudy conditions
- Easy to use, connect 12 volt clips to the battery in a well ventilated area where there
  is adequate sunlight

## 4. TECHNICAL SPECIFICATIONS

Part Number:	TPS-102-2.4W		
Charger Type:	Maintenance		
Rated Power:	2.4 Watt at 1000W/m², 25°C		
Maximum Power Voltage :	ge: 17.5V		
Maximum Power Current :	137mA		
Open Circuit Voltage :	21.0V		
Short Circuit Current:	171mA		
Power Tolerance:	+/-3%		
Operating Temperature:	-40°C To + 85°C		
12v Battery Chemistry Types:	Lead Acid, Gel, Calcium & AGM		
*TO ENSURE FULL BATTERY FUNCTIONALITY - CHECK VOLTAGE PRIOR TO USING A MAINTENANCE CHARGER*			
Battery Charge Capacity (Ah/ CCA):	AUTOMOTIVE 100–550CCA MARINE 150–600MCA		

### 5. BATTERY CHARGER DIAGRAM



#### 6. CHARGING INSTRUCTIONS

### Step 1. Electrolyte Level Check

Prior to charging the battery, remove the vent caps on the battery (For sealed maintenance free batteries check the state of charge indicator). If electrolyte levels are low ensure to add demineralised water to the correct level indicated on the battery.

## Step 2. Voltage Check

Prior to connecting the SCA solar maintenance battery charger, ensure that the battery voltage is adequate enough to receive charge. If the battery does not contain enough voltage the maintenance charger will not be able to provide ade quate current to maintain your battery.

Please Note: The SCA solar maintenance battery charger will not charge from zero volts.

\*For voltage requirements see Technical Specifications

## Step 3. Connect SCA solar maintenance battery charger to battery

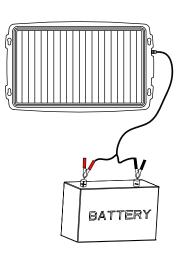
There are two (2) options for connecting the SCA solar maintenance battery charger to a battery

- i. Connect SCA solar maintenance battery charger to a battery 12V Battery Clamps
- ii. Connect SCA solar maintenance battery charger to a battery 12V Cigarette Plug(where 12V Cigarette Plug is provided)
- i. Connect using 12V Battery Clamps

**DO NOT** start the vehicle while the charger is connected to the battery with cigarette lighter or Battery Clamps. Electrical surges from the engine when starting and running may damage your charger.

Important! The black lead & clamp indicates (-/Negative) and the red lead & clamp indicates (+/Positive). Ensure that the correct polarity is connected to prevent a short circuit. This unit is not reverse polarity protected.

- Ensure the battery is in a safe location on a stable surface with adequate ventilation
- Ensure the correct Personal Protective Equipment is being worn I.e. Gloves and Eye Wear
- (If applicable) ensure the batteries vent caps are loosened or removed
- Connect the suction caps to the SCA solar maintenance battery charger (Where applicable)
- Attach to the windshield either inside or outside of the vehicle OR on a surface that is close to the battery
- (\* SCA Maintenance Charger is **NOT** waterproof or water resistant and must be in a well ventilated area)
- Connect the 12V Battery Clamps to the SCA Maintenance Charger
- Connect the RED Battery Clamp to the Positive Terminal (+/Positive) on the battery
- Connect the BLACK Battery Clip to the Negative Terminal (-/Negative) on the battery
   When ready to disconnect
- Disconnect the BLACK lead (Battery Clamp) from the Negative Terminal (-/Negative)
- Disconnect the RED lead (Battery Clip) from the Positive Terminal (+/Positive)
- Using a Voltmeter check the voltage of the battery before connecting it back in the vehicle
- If required, replace the vent caps on the battery
- Ensure that the battery has been secured correctly



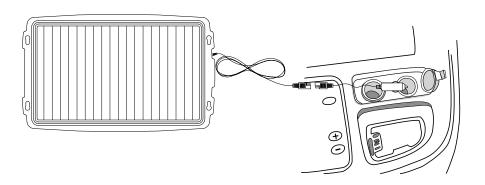
ii. Connect using 12V Cigarette Plug (Where 12V Cigarette Plug is provided) DO NOTstart the vehicle while the charger is connected to the battery with cigarette lighter or Battery Clamps. Electrical surges from the engine when starting and running may damage your charger.

Important! In some cases the 12V cigarette lighter may not operate when the ignition is turned off. In such cases, you can connect the maintenance charger directly to the battery by connecting with the 12V Battery Clamps.

- Ensure the battery is in a safe location on a stable surface with adequate ventilation
- Ensure the correct Personal Protective Equipment is being worn I.e. Gloves and Eye Wear
- (If applicable) ensure the batteries vent caps are loosened or removed
- Connect the suction caps to the SCA solar maintenance battery charger (Where applicable)
- Attach to the windshield either inside or outside of the vehicle OR on a surface that is close to the battery
  - (\*SCA Maintenance Charger is **NOT** waterproof or water resistantand must be in a well ventilated area)
- Connect the 12V Cigarette Plug to the SCA solar maintenance battery charger
- Insert the 12V Cigarette Plug to the 12V Output inside the vehicle

## When ready to disconnect

- Disconnect the 12V Cigarette Plug from the 12V Output inside the vehicle
- Using a Voltmeter check the voltage of the battery before connecting it back in the vehicle
- If required, replace the vent caps on the battery
- Ensure that the battery has been secured correctly



## Step 4. Charging

Once connected, tinted windows or a dirty solar panel will affect the battery chargers ability to charge a battery. The battery charger will need to be placed in a location where there is sufficient sunlight and ventilation available to be able to trickle charge the battery, and (if required) cleaned with a soft cloth to ensure adequate charge.

The charger is designed to top-up charge in a battery due to natural discharge, if your battery is fully discharged please use a suitable 240v AC Battery Charger.

## 7. BATTERY CHARGER SPECIFICATIONS

Part Number:	TPS-102-2.4W	
Charger Type:	Maintenance	
12v Battery Clamps Length:	2.4 Meter	
Case Type:	Plastic	
Solar Panel Amorphous		

## 8. TROUBLESHOOTING

Problem	Indication	Possible Causes	Suggested Solution
Battery charger does not work?	<ul> <li>No indicator lights are illuminating</li> <li>Battery is still flat</li> </ul>	<ul> <li>Charger has not been connected correctly</li> <li>Charger has "short circuited" due to reverse polarity connection</li> <li>Battery voltage was too low to instil charge</li> <li>Charger is not receiving enough sunlight</li> </ul>	<ul> <li>Check connections are secured correctly</li> <li>If short circuit due to reverse polarity connection: Discontinue to use</li> <li>Check battery Voltage level with a voltmeter</li> <li>Move charger to direct sunlight</li> </ul>
The battery is swollen after it has been charged	Battery sides are rounded and swollen	Battery vent caps have not been loosened or removed     Battery has been left on charge beyond its capacity	- Immediately turn the Battery Charger off and remove from the battery. Replace Battery.

#### 9. FREQUENTLY ASKED QUESTIONS

Q. Is the battery charger waterproof or water resistant?

A. No. Please ensure that the battery charger is kept out of extreme weather or wet conditions

Q. Is this battery charger suitable for lithium batteries?

A. No. Please contact your local Supercheap Auto store for lithium battery chargers.

Q. Is this battery charger suitable for 6/12/24Volt batteries?

A. No. The battery charger is only suitable for 12volt Batteries.

Q. Can the battery charger be left on the battery permanently?

A. No. It is recommended that the charger is checked regularly. Leaving a battery on charge permanently may cause damage to your battery.

#### 10. WARRANTY

This product is guaranteed against defects for a period of 12 months from date of purchase. This warranty is provided by Super Cheap Auto Pty Ltd ACN 085 395 124 (Supercheap Auto) of 751 Gympie Rd Lawnton QLD 4501 Ph (07) 3482 7500. Supercheap Auto will offer a repair, replacement product or store credit if the product is assessed as being defective during the warranty period.

To claim under this warranty, take this product to the Front Service Desk of your nearest Supercheap Auto store. For store locations, visit www.supercheapauto.com.au (AUS) or www.supercheapauto.co.nz (NZ). You will need your receipt or proof of purchase. Additional information may be requested of you to process your claim. Should you not be able to provide proof of purchase with a receipt or a bank statement, identification showing your name, address and signature may be required to process your claim.

This product may need to be sent to the manufacturer to assess the defect before determining any claim. Faults or defects caused by product modification, misuse and abuse, normal wear and tear or failure to follow user instructions are not covered under this warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Any expenses incurred relating to the return of this product to store will normally have to be paid by you. For more information contact your nearest Supercheap Auto store.

The benefits to the consumer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods and services to which this warranty relates.