

# SGS

## 12V-18V PORTABLE CAR CHARGER

### User Manual



SGS TOOLS and PARTS PTY LTD  
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## PRODUCT OVERVIEW

This portable charger allows compatible 18V lithium power-tool batteries to be charged directly from a vehicle's 12V or 24V accessory socket.

Compact and lightweight, it is ideal for:

Camping and touring

Mobile workshops

Job sites

Emergency battery top-ups

Off-grid charging applications

The charger automatically adjusts for both 12V and 24V vehicle systems and includes built-in protection circuitry for safe operation.

## KEY FEATURES

Compatible with 12V and 24V vehicle power sockets

Charges compatible 18V lithium power-tool batteries

Compact and lightweight portable design


Built-in overcharge, overheat, and short-circuit protection

Automatic voltage step-up / step-down conversion

LED charging and fault status indication

Ideal for mobile charging applications

## IMPORTANT SAFETY INFORMATION – READ FIRST

 Failure to follow these instructions may result in battery damage, overheating, fire, or injury.

Use only with compatible 18V lithium-ion power-tool batteries

Do not use damaged batteries or chargers

Do not expose the charger to rain, moisture, or excessive heat

Ensure adequate ventilation during charging

Never cover the charger while operating


Do not leave charging batteries unattended for extended periods

Keep away from flammable materials

## PARTS OVERVIEW

Vehicle cigarette-style power plug  
Charger body  
Battery interface / charging dock  
Red / green LED status indicator  
Internal protection circuitry

## BEFORE USE

Inspect charger, cable, and battery for damage  
Ensure the vehicle accessory socket is clean and functional  
Confirm battery is compatible with the charger  
 Do not use if any components appear damaged.

## OPERATING INSTRUCTIONS


### 1. Connect Charger to Vehicle Power

Insert the cigarette-style plug fully into the vehicle's:  
12V accessory socket, or 24V accessory socket  
The charger will automatically detect and regulate input voltage.


### 2. Install Battery

Slide the compatible 18V battery onto the charger until securely locked into place.

### 3. Charging Status

The LED indicator will illuminate to show charger status.  
Charging and fault conditions are indicated by the red / green LED system.  
 Refer to the separate **LED Status Guide** for full indicator definitions.

### 4. Charging Completion

Once charging is complete:  
Remove the battery from the charger  
Disconnect the charger from the vehicle power socket  
 Always disconnect the charger when not in use.

## BUILT-IN SAFETY FEATURES

### Intelligent Charging Protection

The charger includes integrated protection systems designed to improve safety and battery longevity.

Protection features include:

Overcharge protection

Over-temperature protection

Short-circuit protection

Automatic voltage regulation

Input voltage protection for 12V / 24V systems

If a fault condition is detected, charging will automatically stop.

## LED STATUS INDICATOR

The charger uses a red / green LED indicator system to display:

Charging status

Fully charged status

Fault conditions

Protection mode activation

 Full LED definitions are provided on the separate LED Status Guide page.

## VEHICLE USE NOTES

Suitable for most standard automotive and heavy vehicle accessory sockets

Best used while the vehicle is running to prevent draining the vehicle battery

Charging speed may vary depending on:

Vehicle supply voltage

Battery charge level

Battery capacity

Ambient temperature

 Avoid using loose or damaged vehicle power sockets.

## STORAGE & MAINTENANCE

Disconnect charger after use

Do not pull or carry by the cable

Store in a cool, dry location

Avoid impact or crushing damage

Keep vents and connectors clean

## WARNINGS & MISUSE

 Do NOT:

Use with non-compatible batteries  
Modify or disassemble the charger  
Operate in wet environments

Cover the charger during operation  
Use damaged vehicle sockets/cables  
Attempt to repair the unit yourself

## INTENDED USE

This product is intended for charging compatible 18V lithium-ion power-tool batteries from standard 12V or 24V vehicle accessory sockets.

It is not intended for:

Jump starting vehicles

Power inversion

Battery repair or recovery charging

Charging non-lithium battery systems

## IMPORTANT LEGAL NOTICE (AUSTRALIA)

This product comes with guarantees that cannot be excluded under the Australian Consumer Law (ACL).

You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage.

You are also entitled to have the product repaired or replaced if it fails to be of acceptable quality and the failure does not amount to a major failure.

## 12-MONTH LIMITED WARRANTY (AUSTRALIA)

This product is warranted to be free of defects in materials & workmanship under normal use for a period of 12 months from the date of purchase.

This warranty does not cover:

Damage caused by misuse or incorrect operation

Damage caused by incompatible batteries

Water or moisture damage

Physical damage or unauthorised modification

Normal wear and tear

This warranty is provided in addition to your rights under Australian Consumer Law.





## STORAGE

Store disconnected from vehicle power

Keep away from moisture and direct sunlight    Store out of reach of children

## LED Status Indicator Guide

See also 'Quick Reference Guide Decal' on top of charging device.

-  Solid Red – Charging
-  Solid Green – Standby / Fully Charged
-  Flashing Green – Fault / Protection Mode
-  Flashing Red – Battery Error / Temperature Protection