



MANUAL

SPN-12-Smooth-DC-L/R

Premium Solar Panel Pro Smooth made of glass

SPN-12-Smooth-DC-L Cable outlet left

SPN-12-Smooth-DC-R Cable outlet right



AUTONOMOUS



NO MAINTENANCE



CHARGING PORT

MANUAL SPN-12-SMOOTH-DC-L/R

VOLL® SOLAR PANEL PRO SMOOTH

1. INTRODUCTORY INFORMATION

1.1 GENERAL DESCRIPTION

The VOLL® Solar System 12 consists of a left- and right-hand solar panel (SPN-12-Smooth-DC-L or SPN-12-Smooth-DC-R) with charging port, a battery (B-12-LFP), a charger (C-12-LFP) and an adapter cable (V-12-N). The solar panel can be used with a wide range of 12 V solar motors. The sunlight captured by the panel is converted into electrical energy and can be stored in the battery, allowing the solar motor to operate autonomously. If the battery becomes depleted, it can be recharged through the panel's charging port using the corresponding charger. The charging port must always face downward; therefore a left- and a right-hand version of the panel are available.

1.2 SCOPE AND INTENDED USE

The solar panel captures sunlight and converts it into electrical energy to charge the external battery. The panel can also be used on solar motors with an internal battery. The panel's charging port is suitable for connecting the charger and must always point downward. When the charging port faces downward, the cable outlet of the right-hand panel is on the right and the outlet of the left-hand panel is on the left. No modifications to the system are permitted. Use caution.

1.3 LIABILITY

- Read this manual carefully before installing and using this product.
- The solar panel must be installed by a professional installer of drive and automation systems in accordance with VOLL® instructions and the regulations in force in the country of use.
- Any use of this product outside the scope described above is prohibited. Failure to comply with the instructions in this manual voids VOLL®'s liability and warranty.
- The installer must inform the customer about the conditions for use and maintenance of this product and, after installation, hand over the operating and maintenance instructions. Service work may only be carried out by an authorised installer.
- VOLL® strives to continuously improve all products; therefore specifications, applications and technologies mentioned in this sheet may be changed at any time. The information provided in this document is based on the knowledge available at the time of publication. No rights can be derived from the information, diagrams or illustrations in this manual.

If in doubt about installation or for additional information, contact a VOLL® dealer or visit voll-energie.nl.

2. SAFETY INSTRUCTIONS

- Use only for the scope and purpose described in section 1.2.

- Keep out of reach of children.
- Connect the solar panel only according to the wiring diagram provided.
- Recycle the solar panel only by the method described.
- Do not place objects on the solar panel.
- Do not drop the panel, strike it, pierce it or immerse it in water.

3. INSTALLATION

3.1 CONNECTION REQUIREMENTS

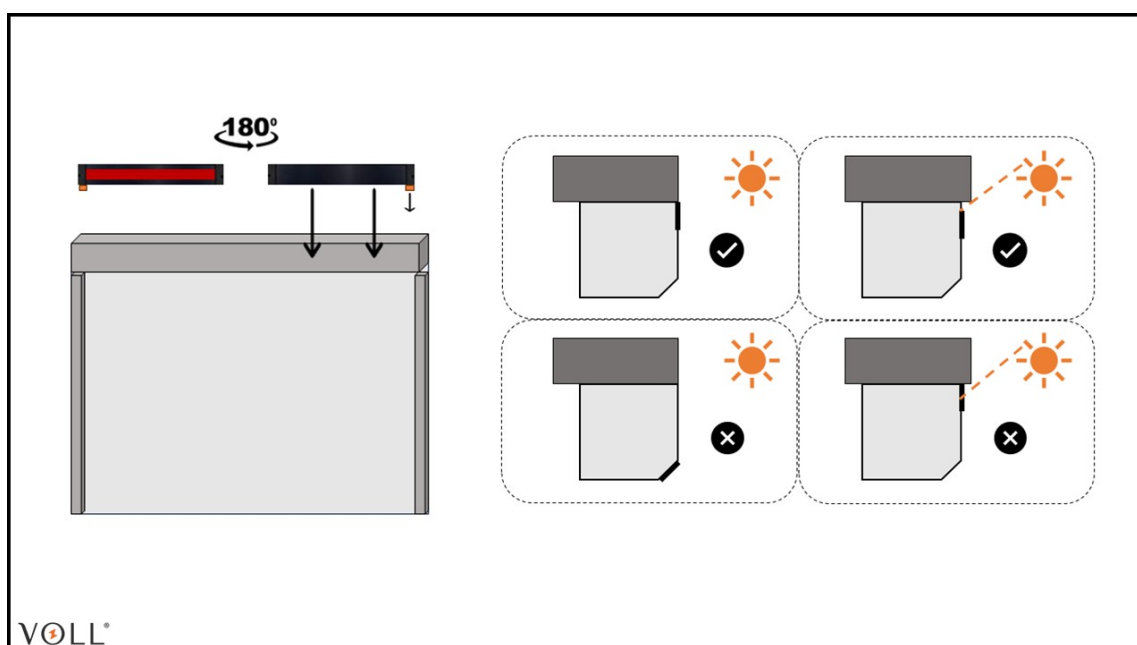
- The professional installer of drive and automation systems who installs the solar panel must strictly follow the guidelines below.
- The solar panel is intended for outdoor use only. It must not be installed behind a window or other glass.
- The panel must always be placed in direct sunlight. Installation in shade must be avoided at all times, as this significantly reduces its performance.
- Ideally, the panel should be installed as close as possible to the motor and battery.
- Avoid loose cables as much as possible.
- Ensure that the connection from panel to battery or motor is secure.

No modifications may be made to the panel's connector after delivery from VOLL®.

3.2 MOUNTING

The solar panel is mounted using a self-adhesive strip on the clean, flat surface of the awning housing or cover.

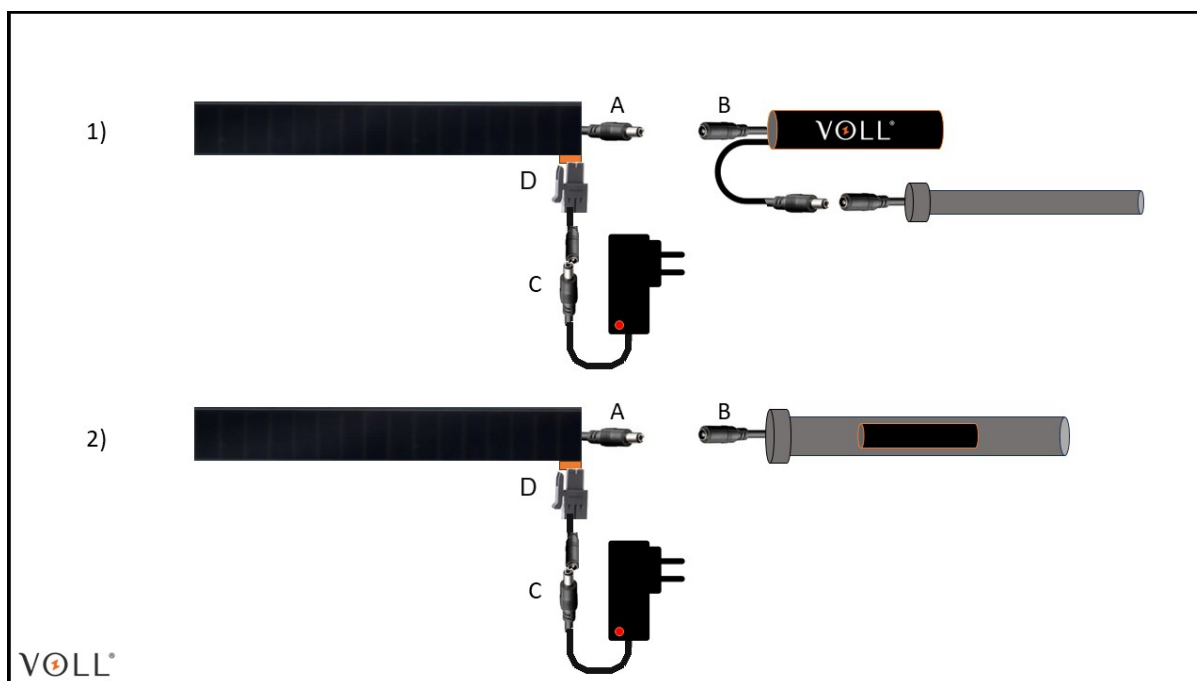
The panel must always be placed in direct sunlight as shown in the instructions below. The charging port must always face downward.



3.3 WIRING DIAGRAM

The solar panel can be connected in two ways:

1. Connect the panel via A to B on the external battery. The charger is connected via C and the adapter cable D (V-12-N) to the panel's charging port.
2. Connect the panel via A to B on the solar motor with internal battery. The charger is connected via C and the adapter cable D (V-12-N) to the panel's charging port.



A = DC3.5X1.35-M; B = DC3.5X1.35-F; C = DC3.5X1.35-M; D = V-12-N (DC3.5X1.35-F to Molex M).

4. MAINTENANCE, STORAGE AND RECYCLING

4.1 MAINTENANCE

A solar motor operates fully autonomously and therefore requires no maintenance, provided the panel is installed in direct sunlight.

If the panel is not installed in direct sunlight, the battery can be charged externally by connecting the charger to the panel.

Keep the panel free of snow and ensure it is not covered.

Keep the panel surface clean by regularly washing it with clean water and a soft cloth to avoid scratches.

If, after charging, the solar motor still does not operate properly, the battery may need to be replaced or the panel installation adjusted.

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4.2 STORAGE

Ensure the panel is disconnected from the motor and battery during long-term storage.

4.3 RECYCLING



The panel must not be disposed of with household waste. The consumer and/or installer is legally obliged to recycle it via a local collection point.

Separating and recycling the panel helps to protect our environment.

5. TECHNICAL DATA

5.1 DATASHEET

SPN-12-Smooth-DC-L/R	
Max. power (STC)	5.2 W
Voltage (UOC/UMPP)	20/16 V
Output current (ISC/IMPP)	355/325 mA
Protection class	IP44 (photovoltaic cells: IP67)
Dimensions (L×W×H)	540x56x6.5 mm
Weight	750 g
Operating temperature	-20 °C to +70 °C

5.2 CERTIFICATION



VOLL B.V. hereby declares that this product meets the essential requirements and other relevant provisions of the applicable European Union directives, in particular the Electromagnetic Compatibility Directive 2014/30/EU and the Restriction of Hazardous Substances Directive 2011/65/EU. The full EU declaration of conformity is available on request from a VOLL® dealer or at voll-energie.nl.

Ir. Jim Hazelberg, Director, 09/2026