

OptiMate NCS0301

OptiMate Solar Pulse 30W Car Battery Maintainer Instruction Manual

Model: NCS0301

INTRODUCTION

Thank you for choosing the OptiMate Solar Pulse 30W Car Battery Maintainer. This device is designed to efficiently charge and maintain 12V lead-acid and 12.8V LiFePO4 batteries in various vehicles, including passenger cars, hybrids, and idle-stop vehicles. It features an advanced OptiMate controller for optimal battery health and longevity. Please read this manual carefully before use to ensure proper operation and safety.



OptiMATE
solar

オプティメイト
ソーラーパルス 30W

1年
保証付き
(保証期間に限り)

誰でも簡単に**車内設置**ができる!
OBDIIコネクタで簡単接続!
バッテリーに触れずに接続可能!

The OptiMate Solar Pulse 30W system, featuring the solar panel and the intelligent charge controller, is ideal for maintaining 12V lead-acid and 12.8V LiFePO4 batteries in passenger cars, hybrids, and idle-stop vehicles.

SETUP

The OptiMate Solar Pulse 30W offers flexible and secure installation options.

Connection Methods

- **OBDII Connector:** For convenient in-car connection without directly accessing the battery. This method also provides theft prevention as the panel remains inside the vehicle.
- **Crocodile Clips:** For direct connection to the battery terminals.

Installation Steps (OBDII Method)

1. **Prepare for Installation:** Ensure the solar panel and controller are connected to the OBDII connector cable.
2. **Install the Panel:** Place the solar panel in a location with direct sunlight, typically on the dashboard or attached to the windshield using suction cups (suction cups included).
3. **Insert into OBDII Connector:** Plug the OBDII connector into your vehicle's OBDII port. The port is often located under the dashboard on the driver's side.

**過充電防止&日照不足でも安心。
LEDランプで充電状況をひと目でチェック!**

充電状況を
4段階
LED表示

充電なし時の
電圧状況を
7段階
LED表示

CHARGE  

MONITOR  

世界中で知られるオプティメイトコントローラーを採用!

Connect easily via the OBDII port without touching the battery. The panel can be placed inside the car, offering theft protection. Crocodile clips are also included for direct battery connection.

こんなに簡単!車内で楽々設置♪

STEP 1 設置準備!
(パネル・コントローラー・OBD II コネクタ手接続)

STEP 2 パネルを設置

STEP 3 OBD II コネクタに差込



OBD II コネクタへの差込も簡単!

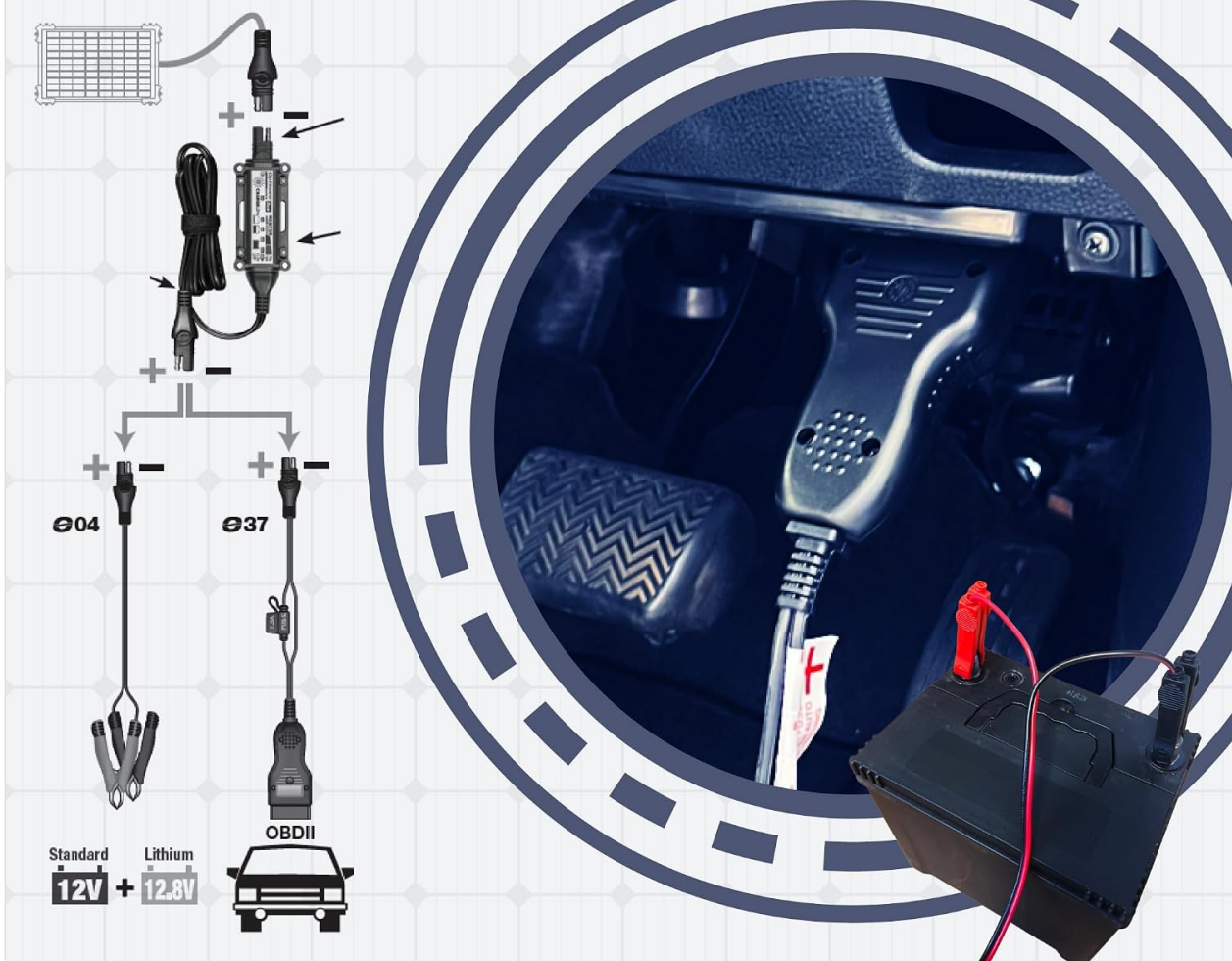
※コネクタ位置は運転席右下が多いです

パネルの設置方法は自由自在
(フック別売)



Simple 3-step installation: 1. Connect panel and controller to OBDII. 2. Place the panel. 3. Insert into OBDII connector. Panel placement is flexible, hooks sold separately.

選べる充電方法 (OBD II 経由、バッテリー直接接続)



Choose your preferred charging method: via OBDII connector for convenience or direct battery connection using the included crocodile clips.

Video Guide: OptiMate Charger Connection

This video demonstrates the setup and operation of the OptiMate 6 AmpMatic charger, including connecting to a car battery, understanding LED indicators for charging and maintenance modes, and the automatic current adjustment feature. Note: This video features a different OptiMate model (OptiMate 6) but illustrates general connection and indicator principles relevant to OptiMate chargers.

This video provides instructions on how to use the OptiMate 6 12V/24V charger, covering the selection of charging programs for different battery types (including AGM) and voltages, connection procedures, and interpretation of the LED status lights. Note: This video features a different OptiMate model (OptiMate 6) but illustrates general connection, program selection, and indicator principles relevant to OptiMate chargers.

This video demonstrates the installation and use of a 10W solar trickle charger, showing how to connect it via the cigarette lighter socket and place the solar panel on the dashboard using suction cups. It highlights the ease of use for maintaining battery life. Note: This video features a 10W solar charger from a different brand (Nicesolar) but illustrates general solar panel connection and placement methods that may be applicable.

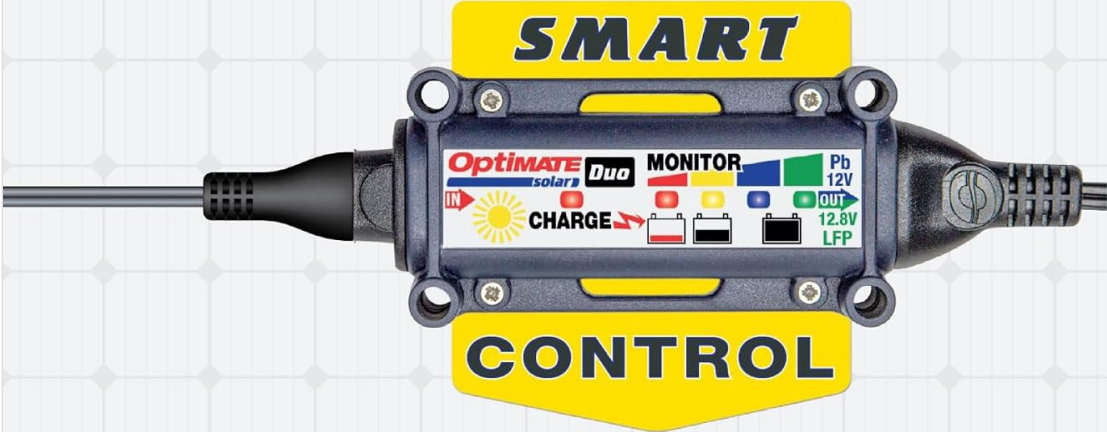
OPERATING INSTRUCTIONS

The OptiMate Solar Pulse 30W features an intelligent controller that automatically manages the charging process.



Automatic Charging and Monitoring



- The built-in OptiMate controller ensures efficient charging and prevents overcharging, even in conditions with insufficient sunlight.
- LED lamps on the controller provide a clear visual indication of the charging status.
- After the battery reaches full charge, the system automatically switches to a maintenance charging mode, safely managing your battery without intervention.

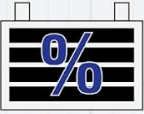
昼も夜もバッテリー状態がわかる！
充電できているか**簡単確認**！



The image shows the OptiMate Duo SMART CONTROL solar controller. It is a black rectangular device with a yellow top and bottom section. The top section has the word "SMART" in black on a yellow background. The bottom section has the word "CONTROL" in black on a yellow background. The main body of the device is black and features several labels and indicators: "OptiMate solar Duo MONITOR" in red and white, "Pb 12V" in blue, "OUT 12.8V LFP" in green, and "CHARGE" with a red arrow pointing to a battery icon. There are also four colored LEDs (red, yellow, blue, green) and a battery icon with a percentage sign.

日中  **SMART 24-7 CARE**  夜間

CHARGE  

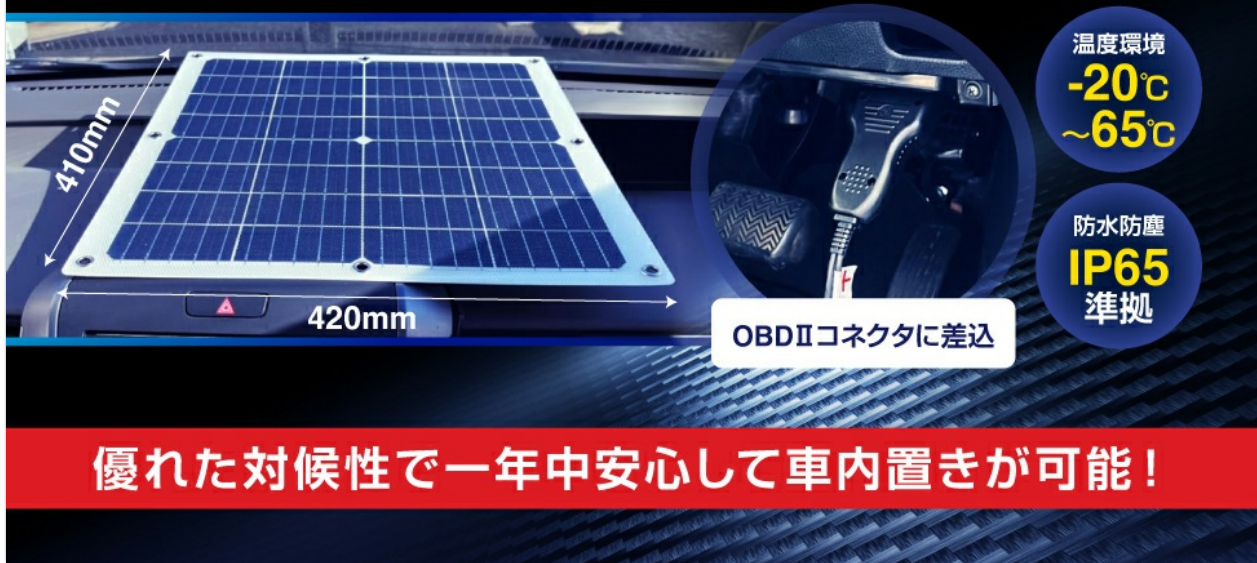
MONITOR  

充電状況(充電電圧)を
4段階でLED表示

充電なし時の電圧状況を
最大7段階でLED表示

The smart controller provides 24/7 monitoring, showing charging status (charging voltage) in 4 LED stages and voltage status (when not charging) in up to 7 LED stages.

軽量&薄型設計でラクラク! ダッシュボードにコンパクトに設置可能!



The OptiMate controller prevents overcharging and ensures reliable performance even with insufficient sunlight. LED lamps clearly indicate charging status.

MAINTENANCE

The OptiMate Solar Pulse 30W is designed for long-term battery maintenance.

Maintenance Mode

Once the battery is fully charged, the system automatically enters a maintenance mode. This mode repeatedly charges and rests the battery, supplying only the necessary electricity and performing health diagnostics during rest periods. This gentle charging method is ideal for extending battery life.

Note: This is not a trickle charge; it's an advanced maintenance program.

TROUBLESHOOTING

If you encounter issues, refer to the following common problems and solutions:

- **Red LED Indicator:** If the red LED lights up, it often indicates a poor connection. Recheck all connections to ensure they are secure.
- **No Charging Activity:** Ensure the solar panel is exposed to sufficient direct sunlight. While the OptiMate controller works even with insufficient sunlight, optimal performance requires good sun exposure.
- **Battery Not Recovering:** This product is designed for maintenance and slow charging. It is not suitable for recovering severely discharged batteries. For deeply discharged batteries, a dedicated high-power charger may be required.

SPECIFICATIONS

Feature	Detail
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Brand	OptiMate
Model Number	NCS0301
Product Dimensions	41 x 3 x 42 cm
Product Weight	1.37 kg
Color	Black
Included Components	Cables, Suction Cups
Max Power Output	30 Watts
Efficiency	High Efficiency
Panel Dimensions	Approx. 418 x 410 x 2.3 mm (excluding wiring)
Panel Weight	Approx. 650g (panel only, excluding cable)
Operating Temperature	-25°C to 65°C
Waterproof/Dustproof	IP65 Compliant

対候性

一年中安心して車内置きが可能



パネル仕様

温度環境

-25°C~65°C

防水防塵

IP65準拠

パネル部サイズ

約418×410×2.3 (mm)

(配線部接続部除く)

約650g

(ケーブルを除くパネルのみ重量)

Detailed specifications of the OptiMate Solar Pulse 30W panel, highlighting its robust design and weather resistance.

WARRANTY

The OptiMate Solar Pulse 30W comes with a **1-year warranty**. Please refer to the warranty regulations provided with your product for full details on coverage and terms.

SUPPORT

For technical assistance, product inquiries, or warranty claims, please contact the manufacturer, OptiMate (TecMate), or your authorized dealer. Keep your purchase receipt and product model number (NCS0301) handy for faster service.

You can find more information and resources on the official OptiMate website: [optimates1.com](https://www.optimates1.com)