

**CARGADOR AUTÓMATICO DE BATERÍAS**  
**AUTOMATIC BATTERY CHARGER**  
**CARREGADOR AUTOMÁTICO DE BATERIAS**

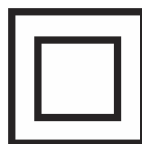
**8A RMS (5.4A DC)**

**NOVACAR 10A**

Adequado para todo tipo de baterías de plomo ácido, selladas, auxiliares y de gel de entre 20-120Ah  
Suitable for 12V Normal Lead Acid, Sealed, Leisure or Gel Batteries with capacity between 20-120Ah  
Adequado para todo o tipo de baterias de chumbo/ácido entre 20-120Ah



For indoor use



## INTRODUCTION

The NOVACAR 10A is member of the family of advanced battery chargers manufactured by Solter.

NOVACAR chargers will increase your battery's performance and prolong its life.

**Please carefully read and follow the following safety and operating instructions.**

## IMPORTANT SAFETY INSTRUCTIONS

### Gases

When the battery is being charged you may notice bubbling in the fluid caused by the release of gas. As the gas is flammable no naked lights should be used around the battery, and the area should be kept well ventilated.

Because of this risk of explosive gas only connect and disconnect the battery leads when the mains supply is disconnected.

### Type of batteries

This charger is only suitable for normal lead acid, sealed, leisure or gel batteries and should not be used to recharge NICAD or any other type of battery.

### Points of note

- When not in use, store the charger in a dry area to avoid moisture damaging the transformer.
- Your Battery Charger is suitable for *INDOOR USE ONLY*. Keep away from liquids, rain or snow at all times.
- This battery charger is not designed as power supply.

### Repair

- The Battery Charger should not be opened. Any attempt at modification or repair by the user will entail the loss of your guarantee.
- The mains supply cord of this appliance can not be replaced; if the cord is damaged, the appliance should be discarded.

### Danger!

- Avoid getting electrolyte on your skin or clothes. It is acidic and can cause burns. If this occurs you should rinse the affected area with water immediately.
- If it gets into your eyes - wash thoroughly and seek medical attention immediately.
- Never charge a frozen battery. If battery fluid (electrolyte) becomes frozen, bring battery into a warm area to allow battery to thaw before you begin charging. Never let a battery on top of charger or vice versa.
- Do not touch the battery clamps together when the charger is on.
- Never operate charger if it has received a hard blow, been dropped, or otherwise damaged. Take it to a qualified professional for inspection and repair.
- Be sure to position the charger power cord to prevent it from being stepped on, tripped over, or damaged.
- Never pull out the plug by the cord when unplugging the charger. Pulling on the cord may cause damage to the cord or the plug.

### Precautions When Working with Batteries

- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 20 minutes and get medical attention immediately.
- Never smoke or allow a spark or flame in vicinity of battery or Engine.
- Do not drop a metal tool on the battery. The resulting spark or short-circuit on the battery or other electrical part may cause an explosion.
- Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery.

- A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, causing severe burns.

## FEATURES

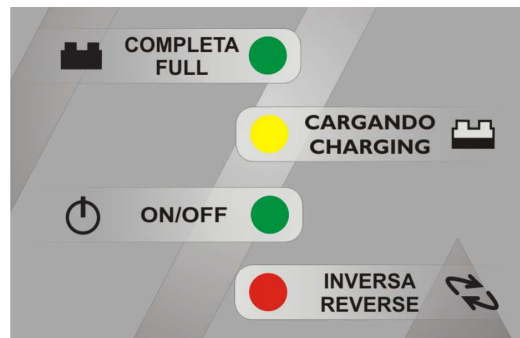
### Automatic charging

The NOVACAR 10A offers 2 stages automatic charging. Automatic switching from charging to maintenance mode after battery is fully charged.

### LED display

The unit is built-in with LED display for showing charger status:

- **FULL** - GREEN LED – The battery is fully charged and the charger is in maintenance mode.
- **CHARGING** – AMBER LED – The charger is charging to the battery.
- **POWER** - GREEN LED – The charger is connected to mains power.
- **REVERSE** – RED LED – DC clamps are connected in reverse polarity.



### Reverse-polarity protection

This unit offers reverse-polarity protection, the RED "REVERSE" LED will illuminate and the charging process will not start. If this happens, unplug immediately from mains, connect the red crocodile clip to positive (+) battery post, and black crocodile clip to negative (-) post, then plug into the mains power and the charging process will start.

### Short-circuit protection

Should you accidentally touch the crocodile clips together whilst the mains power is on, the unit will not perform charging. Unplug from mains, disconnect and start the process again being careful not to touch the clips together.

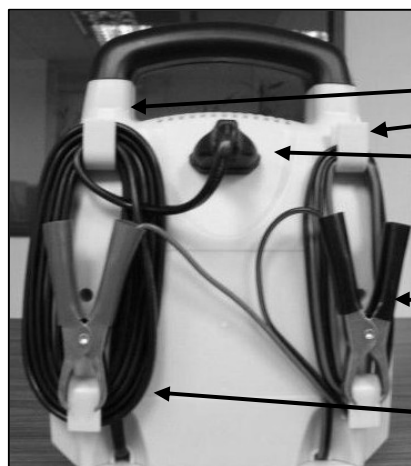
### Maintenance mode

When the battery is fully charged, the charger will automatically switch to the maintenance flow mode charge. The Green "FULL" LED will illuminate. Unplug from mains, disconnect the battery.

### Overload protection

The unit is built-in with an automatic reset circuit breaker. When the charging current exceeds rated current, the charging process will automatically stop. Unplug from mains, disconnect the battery and start the process.

## **COMPONENT LIST**



**CABLE BRACKET**

**VDE PLUG**

**POSITIVE CROCODILE CLIP (+)**

**NEGATIVE CROCODILE CLIP (-)**

**CARRYING HANDLE**

**BATTERY TYPE SELECTOR**

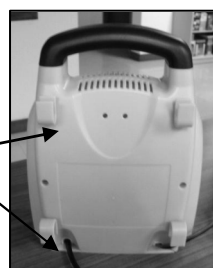
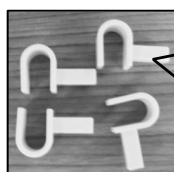
**CHARGE SPEED SELECTOR**

**CHARGE STATUS LED INDICATOR**



### **Storing of the cables**

Included with the Battery charger are 4 pieces of "U" shaped brackets. These should be assembled to the rear of the charger. Both mains and DC leads can be wound onto these brackets for storage.



## **OPERATION**

**PLEASE READ CAREFULLY BEFORE USING**

**Suitable for all type of 12V lead acid, Sealed, Leisure or Gel Batteries batteries between 20-120Ah.**

### **1. Charging your battery**

It is essential to disconnect the battery from the car. This will avoid possible damage to the alternator. To avoid damage to the bodywork from possible spillage, remove the battery completely from the vehicle. It is advisable to use gloves when handling the battery, as there is a high possibility of corrosive acid being on the outside of the battery.

## **2. Preparing the battery**

Firstly remove the caps from each cell and check that the level of the liquid is sufficient in each cell. If it is below the recommended level, top up with de-ionized or distilled water.

**Note:** Under no circumstances should tap water be used.

The cell caps should not be replaced until charging is complete. This allows any gases formed during charging to escape. It is inevitable that some minor escape of acid will occur during charging.

For permanently sealed battery, it is not necessary to carry out the above checks.

## **3. Connection**

Connect the positive charging lead (red) to the positive terminal post of the battery (marked P or +). Connect the negative charging lead (black) to the negative terminal post of the battery (marked N or -).

It is important to ensure that both DC clamps are making good contact with their respective terminal posts. If the DC battery clamps are connected improperly to the battery terminals, the reverse polarity LED will indicate the reversed polarity. If this occurs simply disconnect the battery charger from the AC power connect the DC clamps correctly to the battery terminals. Reconnect the charger to the AC power.

## **4. Selection of battery type**

When a standard type lead acid battery (including sealed, leisure) is to be charged, switch the battery type selector to NORMAL. When a Gel Cell type battery is to be charged, switch the selector to GEL CELL. Dependent on the type of battery you have selected, the battery charger will automatically switch to maintenance mode at different cut-off full voltage level.

## **5. Selection of current (Trickle Charge / Fast Charge)**

Your battery charger is equipped with a slow/fast charge selector. If you are charging a small lead acid battery, or you only require a slow charge, then you should toggle the rocker switch to TRICKLE CHARGE. If, however, you are charging a large, or leisure type battery, or you require a quick boost charge then you should toggle the switch to FAST CHARGE.

## **6. Charging**

Insert the plug into the mains supply. The GREEN "POWER" LED will light up and the charger will now be operating (there is no on/off switch on the charger).

If all the conditions are fine, the battery charger will start supplying charges and the AMBER "CHARGING" indicator will light up.

Finally the charger will automatically switch to maintenance mode. The GREEN "FULL" LED will illuminate and indicates that the battery is now fully charged.

## **7. When charging is complete**

Switch off the mains supply, unplug the charger, and disconnect the leads from the battery posts. Inspect the liquid levels in each cell and top up. If necessary, using the correct fluid. Replace the caps. Any surplus fluid around the cell tops should be wiped off (this should be done with extreme care as it may be acidic/corrosive).

Where appropriate, if the battery has been removed for charging, replace it and reconnect the cables.

## MAINTENANCE AND CARE

It is essential to keep your battery regularly charged throughout the year, especially during the winter months. In the winter the effectiveness of your car battery is reduced by the cold. Oil is thick. Engines are difficult to start and the heater, windscreen wipers and lights are all draining power. It is at this time that batteries have to be at peak power. If your battery is not regularly maintained and kept fully charged, it can cause problems and a possible breakdown.

Listed are some helpful hints on how to keep your battery healthy in conjunction with your Battery Charger.

### Faulty Cells

Batteries are usually made with six cells. One of these cells can deteriorate or get damaged. If, after several hours charging your battery is still flat, you should test the battery. Take hydrometer readings from each cell in the battery. If one reading is lower than the others, this could indicate a faulty cell. If necessary, get an Auto-Electrician to check your battery. One faulty cell is enough to ruin your battery.

It is pointless to continue using it and you would be better getting a new one.

### Care

Sometimes the battery may appear flat, but this could simply be dirty or loose connections on your battery terminals. It is important to maintain the leads on a regular basis. Do this by removing the leads from the battery, clean the inside of each connector and terminal posts on the battery, smear the terminal posts and connectors with Vaseline, refit in their correct positions and tighten firmly.

It is essential to keep the electrolyte level above the plates.

Note, however, that you should not overfill it, as the electrolyte is strongly acidic. When topping up do not use tap water. Always use distilled or de-ionized water. It is important to keep the acid level up. If necessary have it checked by your garage.

### Checking the condition of your battery

Using a hydrometer, which can be purchased, from most motor accessory stores, you can check the specific gravity of the electrolyte in each cell. The hydrometer is used to suck up a quantity of fluid from the cell. The weighted float inside the hydrometer will register the condition of that cell. Put the fluid back into the cell after testing, taking care not to splash the fluid about.

## TECHNICAL SPECIFICATIONS

For 12V Normal Lead Acid, Sealed, Leisure or Gel Batteries.

Input: 220V – 240V ~ 50Hz Max. 110W

Output: *Fast Charge:* 12V, 5,4A DC (8A RMS)

*Trickle Charge:* 12V, 2,5A DC (3,75A RMS)



## ENVIRONMENTAL PROTECTION



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

## WARRANTY

Solter warrants this product for a period of 2 years from the date of purchase to the original purchaser. Warranty is not transferable. Warranty covers defect against workmanship and materials only. To obtain warranty service, please return the unit to the place of purchase or authorized Pro-User dealer together with your proof of purchase. The warranty is void if the product has been damaged or not used as described in this manual. Warranty is void if a non-authorized repair has been performed. Pro-User makes no other warranty expressed or implied. Solter is only responsible for repair or replacement of the defective product and is not responsible for any consequential damage or inconvenience caused by the defect.

**ASISTENCIA TÉCNICA SOLTER**



**ATENCIÓN AL CLIENTE**

**902 43 12 19**

**Email: [solter@solter.com](mailto:solter@solter.com)**

Todos los clientes propietarios de equipos **SOLTER**

En caso de avería o consulta técnica no dude en ponerse en contacto con nosotros y nuestro equipo de profesionales atenderá sus consultas de inmediato.



## **HOMOLOGACIONES**

### **CERTIFICATE OF CONFORMITY**

DECLARACION DE CONFORMIDAD

CERTIFICADO DE CONFORMIDADE

*DECLARACIÓ DE CONFORMITAT*

We SOLTER soldadura, S.L. NIF: B- 17245127  
Yo CTRA. NACIONAL 260, KM 122  
*L'empresa* 17530 CAMPDEVANOL (GIRONA) SPAIN

Declare under our sole responsibility that the product  
Declaro bajo mi responsabilidad que el producto  
Declara sob sua responsabilidade que o Produto  
*Declara sota la seva responsabilitat que el producte*

Name: Nombre: *Nom:* NOVACAR 10A  
Type: Tipo: *Tipus:* NOVACAR 10A

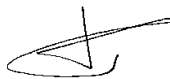
Serial Number: Numero de serie: *Nombre de sèrie:* ALL THE UNITS MANUFACTURED SINCE  
Numero de Série : TODAS AS UNIDADES FABRICADAS DESDE

To which this declaration relates is in conformity with the following  
standard(s) or other normative document(s).  
Al que se refiere esta declaración está en conformidad con la(s) siguiente(s)  
norma(s) o documento(s) normativo(s).  
Ao que se refere esta declaração está em conformidade com as seguintes  
normas ou documentos normativos.  
*Al que es refereix aquesta declaració està de conformitat  
a la(es) següent(s) norma(es) o document(s) normatiu(s)*

**EN 60335-2-29, EN 55014-1-2, EN 61000-3-2, EN 61000-3-3, EN60335-1**

Following the provisions of Directive(s)  
Siguiendo las prescripciones de la(s) Directiva(s)  
Segundo as prescrições das directivas  
*Seguint les prescripcions de la(s) Directiva(es)*  
73/23 EEC, 89/336 EEC, 93/68 EEC

Technical Department  
Campdevàdol, a Junio de 2011



## **CERTIFICADO DE GARANTÍA**



### **CERTIFICADO DE GARANTÍA (Válido solo para España)**

Exija su cumplimentación al adquirir el aparato:

**SOLTER SOLDADURA S.L.** garantiza a partir de la compra y durante 2 años, el artículo contra todo defecto de fabricación o de materiales.

En caso de avería, la garantía cubre las piezas de recambio y la mano de obra, y el titular del equipo disfrutará en cada momento de todos los derechos que la normativa vigente conceda.

La garantía no cubre averías debidas a un mal uso, mal trato o deterioro accidental, así como aquellos aparatos manipulados o reparados por una persona ajena a los Servicios Oficiales **SOLTER**.

**ESPAÑOL:** Para detalles de garantía fuera de España contacte con su distribuidor local.

**ENGLISH:** For details of guarantee outside Spain, contact your local supplier.

**FRANÇAIS:** Pour les détails de la garantie hors d'Espagne, contacter votre fournisseur.

**DEUTSCH:** Einzelheiten über die Garantie Außerhalb des Spanien teilt ihnen gem ihr örtlicher Vertrieb mit.

**PORTUGÊS:** Para informações sobre garantia, fora de Espanha, contacte o seu fornecedor.

**Distribuidor**

**Fecha de venta:**

**MODELO**

**Nº de SERIE**

**Vendido a:**

**Dirección:**

**Población:**

**SOLTER SOLDADURA, S.L.**

Ctra. N-152, Km.112

17530 Campdevànol (Girona) SPAIN

Tel: 972 730084 // Fax: 972 712157

Email: [ventas@solter.com](mailto:ventas@solter.com)

[www.solter.com](http://www.solter.com)