

# IBC15000B

INTELLIGENT BATTERY CHARGER

# PROUSER®

[www.pro-user.com](http://www.pro-user.com)

OPERATING MANUAL	p.03
BEDIENUNGSANLEITUNG	p.18
GEBRUIKSAANWIJZING	p.34
MODE D'EMPLOI	p.50
MODO DE EMPLEO	p.64



IP65





**WITH BLUETOOTH FUNCTIONALITY**

SUITABLE FOR 12.8V LITHIUM AND 12V & 24V LEAD-ACID-BATTERIES, E.G. WET, GEL-, VRLA-, AGM-BATTERIES BETWEEN 25-400AH CAPACITY



**MIT BLUETOOTH-FUNKTION**

GEEIGNET FÜR 12,8V LITHIUM UND 12V & 24V BLEI-SÄURE-BATTERIEN: NASS-, GEL-, VRLA-, AGM-BATTERIEN MIT EINER KAPAZITÄT VON 25 - 400AH



**MET BLUETOOTH FUNCTIONALITEIT**

GESCHIKT VOOR 12,8V LITHIUM ACCU'S EN 12V & 24V LOODZUUR ACCU'S; NAT, GEL, VRLA EN AGM ACCU'S MET 25 - 400AH CAPACITEIT



**15A CHARGEUR DE BATTERIE INTELLIGENT 12V & 24V**

**AVEC FONCTION BLUETOOTH**

CONVIENT AUX BATTERIES 12,8V LITHIUM & AUX BATTERIES PLOMB EN 12V ET 24V: SECHES, GEL, VRLA, AGM, CALCIUM, SANS ENTRETIEN (SM/MF), D'UNE CAPACITÉ DE 25 - 400AH



**15A CARGADOR DE BATERÍAS INTELIGENTE 12V & 24V**

**CON FUNCIÓN DE BLUETOOTH**

PARA BATERÍAS DE LITIO, PLOMO DE 12V Y 24V : SECAS, GEL, VRLA, AGM, CALCIO, SIN MANTENIMIENTO ( SM/MF) DE UNA CAPACIDAD DE 25 - 400AH

## INTRODUCTION

The IBC15000B Intelligent Battery Charger is an advanced battery charger manufactured for Pro-User Electronics that will increase your battery's performance and prolong its life. The IBC15000B Intelligent

Battery Charger with Bluetooth functionality and the free app "BT Charger 2.0" enables you to check and charge your battery with your connected Bluetooth-enabled device. (iOS 8.0 or later, or Android 4.4 or later and a mobile device with Bluetooth BLE Ver. 4.3 or later is needed to connect to the charger).

We have taken numerous measures in quality control to ensure that your product arrives in top condition, and will perform to your satisfaction.

**Please carefully read and follow the safety and operating instructions. Not following these instructions may result in a serious accident, including damaged property, serious or even fatal injuries. If the device is passed on to another person, this manual must also be handed over with it.**

## IMPORTANT SAFETY INSTRUCTIONS



**CAUTION:** Please read this instruction manual carefully before installing and starting up the device. Do not operate the device unless you have fully read and understood all the provided information. If you are not confident working with 12V/24V DC voltage or are unsure of what you are doing, consider to seek for professional help e.g. a car garage or your vehicle's manufacturer. Failure to observe these instructions may cause an electrical shock, fatal or serious injury, material damage or impair the function of the device.

### **Read your vehicle's owner's manual!**

Some vehicle manufacturers may have special requirements before charging the vehicle's battery. (e.g. fuses that have to be removed or certain security demands).

Pro-User accepts no liability for direct or indirect damage caused by faulty connections, a usage of damaged or altered products, a usage for purposes other than described and especially caused by failure to follow these instructions.



**NEVER CONNECT to unsuitable batteries (e.g. NiCd-batteries). Do not charge batteries that are known to be broken. The battery charger is not designed as a jump starter. Not following these instructions could cause serious personal injury or material damage.**



**This unit has safeguards against overheating, reverse-polarity and short-circuit. Despite this, it is highly recommended not to touch or connect the red to the black clamp or to connect the charging cables in reverse polarity. This could cause dangerous sparks and electric arcing. Only connect and disconnect the battery, when the mains supply is disconnected.**



**For indoor use only: Do not use the unit close to open fire. Do not operate the unit in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Please stop using the device, if the unit is getting very hot, is smoking or is showing any abnormal behaviour.**

**Pro-User Electronics is not liable for any direct or indirect damages or injuries caused by the use of the device, especially caused by failure to follow these instructions.**

### **Type of Batteries**

This charger is intended to be used only on 12.8V Lithium batteries and 12V & 24V Lead Acid Batteries, e.g. WET, Gel-, AGM- (including Calcium-) and VRLA-Batteries. Do not try to charge unsupported types of batteries like NiCd or non-rechargeable batteries. Follow the recommendations of your battery's manufacturer.

## **Storage**

When not in use, store the battery charger in a dry environment. Store the battery charger in a safe place out of the reach of children.

## **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, avoid naked flames, glowing or electrostatically charged material and sparks in the vicinity of the battery. Always provide adequate ventilation. Because of this risk of explosive gas, only connect and disconnect the battery leads when the mains supply is disconnected.

## **Maintenance**

The unit is maintenance-free. If necessary, clean the unit with care using a dry cloth. Don't try to open the body casing. There are no user-serviceable parts inside. Damage due to improper use, modifications or attempted repairs lead to the exclusion of liability and the loss of warranty. Do not lengthen or shorten the cables. The mains supply cord and the charging cables of this device cannot be replaced. If they are damaged, the appliance must be discarded.

## **General**

- Electrical devices are not toys. Keep the product away from children.
- Only use the product as intended and for purposes described in the manual.
- After opening the package, examine all parts for visible damage. If you have found any damage, please contact the company you purchased this unit from.
- Always disconnect the power supply (including the connection to the battery) when working on the device.
- Use only approved accessories (especially all cables) or parts fully consistent with the requirements. The installer is responsible for ensuring that the correct cable and fuse sizes are used.
- The surface temperature can reach up to 65°C. Power-off and stop using the device immediately, if the unit is smoking or is showing any abnormal behaviour.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or have been instructed on how to use the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Installing the device, maintenance and repair work may only be carried out by qualified personnel who are familiar with the risks involved, the relevant regulations and with the guidelines and safety precautions to be applied.
- Do not disassemble the device - the internal circuitry contains hazardous voltages. Attempting to service the unit yourself may result in electric shock or fire and will void the unit warranty.
- Always keep metal objects or other materials that can short circuit the terminals of the battery or the device securely away. A resulting spark or short-circuit may not only damage the device, but also cause an explosion and potentially produce a current high enough to weld a ring or the like to metal. Remove personal metal items such as rings, bracelets, necklaces, and watches when working on the device or the battery.
- Operate the device only, if all cables and the housing are undamaged and all connections are tight and clean. Loose or dirty connections could result in overheating, electrical sparks and fire.
- Ensure the device is standing firmly. The device must be set up and fastened in such a way that it cannot tip over or fall down.

## **Environment**

- Only use the product in environments from 0°C ~ 40°C.
- Do not operate the product in damp, wet or dusty environments: Never expose the device to rain or snow. Doing so may result in damage to the device or other equipment installed in the system or result in electric shock or fire. Do not operate the unit in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Do not put batteries, or anything that should be protected from sparks around the device. Doing so may result in fire or explosion.
- To avoid heat accumulation, do not cover the device. To prevent overheating, ensure that air inlets and ventilation is not obstructed. Do not expose the device to a heat source (such as direct sunlight or heating). Avoid additional heating of the device in this way.



### **Electric vehicles**

- The battery charger is not intended for use in electric vehicles

### **Electrical Cables**

- If cables have to be fed through metal holes or other walls with sharp edges, use ducts or cable bushings to prevent damage.
- Do not lay cables which are loose or bent next to electrically conductive material (metal).
- Do not pull on the cables.
- Avoid to lay 230 V mains cable and 6V/12/24V DC cables in the same duct.
- Prevent all cables from being stepped on, tripped over, or being damaged by e.g. sharp edges or hot surfaces.

### **Precautions When Charging Batteries**

- Batteries can store large amounts of energy and improper handling can be dangerous. NEVER CONNECT to a battery with an unsuited voltage or other unsuitable or damaged batteries
- Keep children away from batteries and acid.
- Disconnect the supply before making or breaking the connections to the battery.
- Never try to charge a damaged battery.
- Do not exceed the recommended maximum recharge rate of your battery.
- Never smoke or allow a spark or flame in vicinity of battery or engine.
- Never use the charger when it has received a hard blow, been dropped, or otherwise been damaged. Also check all cables prior to use. Take it to a qualified professional for inspection and repair.
- To avoid heat accumulation, do not cover the charger.
- Never charge a frozen battery. If battery fluid (electrolyte) becomes frozen, bring the battery to a warm area to allow the battery to thaw before you begin charging.
- Place the charger as far away from the battery as is allowed by the length of the charging cables. Do not place the charger directly on top of the battery or vice versa or on a surface constructed from combustible material.
- When your vehicle's battery is fully charged, always remove the charging cables before starting the vehicle.
- Although it is usually possible without causing problems to charge the battery when installed, we recommend to remove the battery from the car before charging. When charging the battery while installed in the car, Pro-User Electronics cannot take any responsibility for harm to your car electronic or the car itself.
- Avoid getting electrolyte on your skin or clothes. It is acidic and can cause burns. If battery acid contacts skin or clothing, wash immediately with water. Baking soda neutralizes lead acid battery electrolyte. If electrolyte gets into your eyes, immediately flood your eyes with running cold water for at least 20 minutes and get medical attention immediately. Gloves and eye protection is therefore highly recommended.
- Always touch the battery clamps together when the charger is circuit battery terminals securely away from the batteries. The resulting spark or short-circuit may cause an explosion and can produce a current high enough to weld a ring or the like to metal. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with starter batteries.
- Prevent the power cord and charging cables from being stepped on, tripped over, or being damaged by e.g. sharp edges or hot surfaces.
- 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. Only use an extension cord if absolutely necessary: If an extension cord must be used, make sure that it is of sufficient size for the supply of current over the required distance and in good condition.
- Observe technical instructions of the seller or the manufacturer of your battery
- Read your car's owner's manual. Some vehicle manufacturers may have special requirements before charging or discharging the vehicle's battery (e.g. fuses that have to be removed or certain security demands).

### **PACKAGING MATERIALS**

To avoid danger of suffocation, do not let children play with foils or other packaging materials. Remove all protective coverings before putting the device in operation.

## SCOPE OF DELIVERY

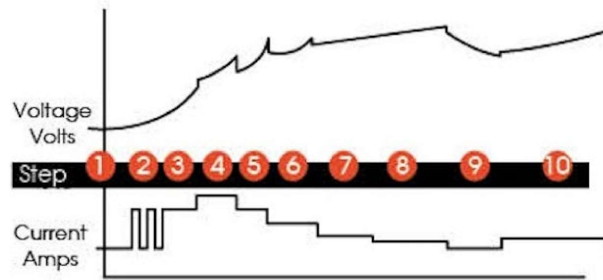
- Pro-User IBC15000B with AC cable and Euro plug and Interface
- 40 cm charging cable with ring terminals and Interface
- 40 cm charging cable with crocodile clamps and Interface
- Operating manual

## TECHNICAL DESCRIPTION



Item	Description
A	Battery charger IBC15000B
B	Charging cables (red (+ positive) and black (- negative) ring terminals
C	Charging cables (red (+ positive) and black (- negative) crocodile clips
D	Mains power cable 230V
E	Pro-User Interface
F	Bluetooth-logo: device is compatible with the free "Check & Charge"-smartphone app
G	MODE-button
H	Display
I	Boost Charge button

## 10 Stages of Charging



**With the microprocessor-controlled charging steps of your Pro-User IBC charger, you are able to recharge your battery to almost 100 % of its original capacity. To ensure that your battery is kept in an optimum condition, your Pro-User charger can be attached permanently even for longer periods. The correct charging step is automatically selected by your Pro-User charger:**

### **Step 1: Check**

Checks the battery voltage to make sure battery connections are good and the battery is in a stable condition before beginning the charging process.

### **Step 2: Recovery**

Initializes a recovery process, if needed, for deeply discharged or sulphated batteries by pulsing small amounts of current.

### **Step 3: Soft Start**

A low charging rate protects deeply discharged or sulphated batteries.

### **Step 4-7: Bulk**

The "Bulk" charging step uses both a high and medium charging rate until about 80% of the battery capacity.

### **Step 8: Absorption**

The battery charger will deliver small amounts of current to provide a safe, efficient charge and limit battery gassing.

### **Step 9 & 10: Maintenance 1 (Trickle) & Maintenance 2**

The battery is fully charged and ready to use (the battery icon stops flashing). In this step, the charger will only deliver enough current to keep the battery full. The battery voltage is continuously monitored to check if a maintenance charge should be initiated: If the terminal voltage falls below 12.8V (12V batteries) or 25.6V(24V), the charger will start a maintenance cycle until voltage reaches 13.6V (12V) or 27.2V (24V). Switching between "trickle-charging" and "maintenance-charging" is repeated indefinitely to keep the battery fully charged without the risk of overcharging. The battery charger can be left connected to the battery for an unlimited amount of time.

## OPERATION

### Please Read Carefully Before Using The Device

This system is intended to be used only with 12V & 24V Lead Acid Batteries, e.g. Wet, Gel, AGM (including Calcium-) and 12.8V 4-cells LiFePO<sub>4</sub>. This charger is suitable to charge...

- 12 V batteries with a capacity of 50 - 400 Ah
- 24 V batteries with a capacity of 25 - 200 Ah
- 12.8V 4-cells LiFePO<sub>4</sub> Lithium batteries with a capacity of 30 - 200 Ah

### Preparing The Battery

It is recommended to disconnect the battery from the car if possible. This will avoid possible damage to the alternator, your car's electronic system and damage to the bodywork from possible spillage. If you remove the battery from the vehicle, always remove the grounded terminal from the battery at first. To avoid sparks, make sure all accessories of the vehicle are turned off. A marine (boat) battery must be removed and charged on shore. (To charge on-board requires special devices designed for marine use).

Follow your battery manufacturer's precautions and preparatory measures, such as removing or not removing cell caps while charging. Make sure the charging rate is not over your battery manufacturer's suggestion.

**For permanently sealed batteries, it is not necessary to carry out the following checks. Don't try to open a sealed or maintenance-free battery.**

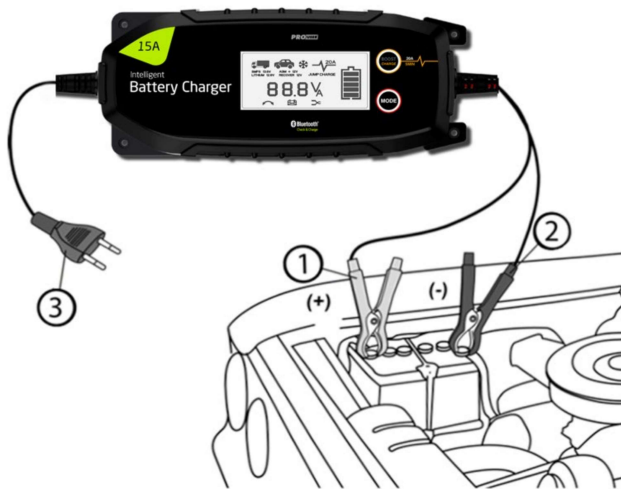
Firstly remove the caps from each cell and check that the level of the liquid is sufficient in each cell. If it is below the recommended level, top up with de-ionized or distilled water.



**ATTENTION:** 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.

### Connecting The Charging Cables

Connect the clamps to the battery in the following order:



**1. Connect the positive charging lead (RED) to the positive terminal post of the battery (marked +).**

**2. Connect the negative charging lead (BLACK) to the negative post of the battery (marked -) or to the Chassis of the car. Please do not connect to fuel lines or carburettor which are not supposed to be connected.**

**It is important to ensure that all connections are making good contact with their respective terminal posts.**

**3. Now you can connect the charger to the mains supply and start charging by selecting the proper charging mode as explained below.**

## Charging

Your Pro-User IBC charger can easily be configured to charge many different types of batteries. The following recommendations should, however, only be seen as guidelines. When in doubt, always consult the battery manufacturer for further instructions.

### Starting the charging process:

1. Once you have established that the battery clamps or eyelets have been correctly connected, you can start the charging process. To do so, insert the charger plug into the AC socket.
2. The charger will start in Standby mode, indicated by the STAND BY LED.
3. Press the mode button to select the appropriate charge mode (press and hold for three seconds to enter an enhanced charge mode) for the voltage and chemistry of your battery. The selected charge mode LED will illuminate.

## Charging Modes





### Charging Modes.


The IBC15000B has nine (9) modes. The Lithium and Recover charge modes require the mode button to be pressed and held for three (3) seconds to enter the enhanced mode. These "Enhanced" modes require your full attention before selecting.

### **NEVER USE RECOVER MODE ON LITHIUM IRON PHOSPHATE BATTERIES.**

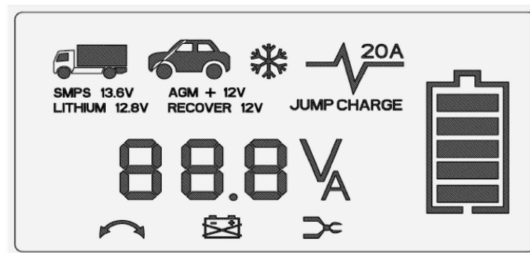
Do not operate the charger until you confirm the appropriate charge mode for your battery.





Below is a brief description:

	<p style="text-align: center;"><b>12V NORM</b></p> <p style="text-align: center;">For charging 12-volt Flooded, Gel, Maintenance-Free batteries.</p> <p style="text-align: center;">14.5V                      15A                      50-400Ah Batteries</p>
	<p style="text-align: center;"><b>12V COLD/AGM</b></p> <p style="text-align: center;">For charging 12-volt batteries in cold temperatures below 50°F (10°C) or AGM batteries. When selected, the LCD will illuminate.</p> <p style="text-align: center;">14.7V                      15A                      50-400Ah Batteries</p>
	<p style="text-align: center;"><b>24V NORM</b></p> <p style="text-align: center;">For charging 24-volt Flooded, Gel, Maintenance-Free batteries. When selected, the LCD will illuminate.</p> <p style="text-align: center;">29V                      7.5A                      25-200Ah Batteries</p>
	<p style="text-align: center;"><b>24V COLD/AGM</b></p> <p style="text-align: center;">For charging 24 volt batteries in cold temperatures below 50°F (10°C) or AGM batteries. When selected, the LCD will illuminate.</p> <p style="text-align: center;">29.4V                      7.5A                      25-200Ah Batteries</p>
<p style="text-align: center;">AGM + 12V</p>	<p style="text-align: center;"><b>12V AGM+</b></p> <p style="text-align: center;">For charging 12 volt advanced AGM batteries that require a higher than normal charge voltage. When selected, the LCD will illuminate.</p> <p style="text-align: center;">15V                      15A                      50-400Ah Batteries</p>
<p style="text-align: center;"><b>RECOVER 12V</b></p>	<p style="text-align: center;"><b>12V RECOVER</b> <small>Press &amp; Hold Mode</small></p> <p style="text-align: center;">For recovering and repairing and storing, old, idle, damaged stratified or sulfated Flooded, Gel, Maintenance-Free Lead Acid batteries. When selected, the LCD will illuminate.</p> <p style="text-align: center;"><b>NEVER USE RECOVER MODE ON LITHIUM BATTERIES</b></p> <p style="text-align: center;">14.7V                      2.6A                      50-400Ah Batteries</p>
<p style="text-align: center;"><b>LITHIUM 12.8V</b></p>	<p style="text-align: center;"><b>12.8V LITHIUM</b> <small>Press &amp; Hold Mode</small></p> <p style="text-align: center;">For charging 12.8-volt lithium iron phosphate batteries. When selected, the LCD will illuminate.</p> <p style="text-align: center;">14.5V                      15A                      30-200Ah Batteries</p>
<p style="text-align: center;"><b>SMPS 13.6V</b></p>	<p style="text-align: center;"><b>13.6V Power Supply</b></p> <p style="text-align: center;">Converts to a DC power supply for powering any 12V DC device. When selected, 13.6V LCD will illuminate</p>

	<p><b>JUMP CHARGE = Boost Charge</b>  2.6A, 270 seconds; then 20A, 30 seconds. That means the charger charges the battery 270 seconds on the first part to warmup the battery, then charges it 30 seconds with extremely high current to "bump" up the battery. After that the charger will go to standby status and can be charged in a normal way.</p>

**Note:** Depending on the condition of the battery, the charger adapts the charging currents to ensure optimum charging of the battery. Only during the main charging phase, the battery is charged with the maximum charging current. Shortly before the maximum charging capacity has been reached the charging current is reduced. This ensures a gentle and best possible charging up to the battery's maximum capacity.



Item	Description
	<p><b>Wrong Polarity:</b> This symbol flashes if a battery was connected in reversed polarity. Check the polarity and connection and reattach the charging cables.</p>
	<p><b>Defective-Battery:</b></p> <ul style="list-style-type: none"> <li>- As soon as the battery charger has been connected to the mains, the charger analyses the connected battery: If the battery voltage is lower than 2.0 V or higher than 28 V, the battery is not suitable or defective and the "Defective-Battery"-symbol lights up.</li> <li>- If the connected battery is charging in "RECOVER-12V"-Mode and after 3 hours the battery's voltage is still not higher than 12V the battery is also considered as defective.</li> </ul>
	<p><b>Not Connected:</b> This symbol flashes if no battery is connected or the connection is interrupted. Check the connection and reattach the charging cables.</p>
	<p><b>Battery-level:</b>  This symbol will flash during the charging process. The bars indicate the progress:  1 bar (20%), 2 bars (40%), 3 bars (60%), 4 bars (80%), 5 bars (90%)  If the symbol stops flashing, the battery is considered as fully charged and the charger will switch automatically to "Maintenance / Trickle charging" to keep the battery in a fully charged state.</p>

---

### **Memory-function**

The charger will return to the last charging mode when disconnected and reconnected. If this mode is not compatible with the connected battery, the charger will automatically return to Standby-mode.

### **Defective Battery Detection And Recovery**

Even if the battery voltage is very low, the charger tries to rescue the battery. If the battery voltage is between 14V to 21V it is not clear whether a fully charged 12V battery or a deep-discharged 24V battery is connected. The charging process automatically commences with a gentle impulse charge, trying to reactivate a 24V battery until the voltage rises. This way, even batteries believed dead can be made reusable. If voltage doesn't rise over 21 within 2 hours, the "Defective-Battery"-symbol lights up and the connected battery is considered as defect.

### **Zero-Volt-Battery-Charging**

This function is used in lithium batteries. As lithium battery packs have Protection Circuit Modules (PCM), the Output voltage is 0V when the PCM has activated. A very small pulse current is used to sense the connection of the battery.

### **Maintenance / Trickle charging**

After the battery has been fully charged, the charger automatically changes to trickle charging. Depending on the measured voltage, the charging process is interrupted or the battery is maintained in a fully charged condition with low charging currents. A battery can remain permanently connected to the charger without damage or adverse effect on its performance. The trickle charge can be used to maintain a battery.

### **Overheat-Protection**

If the charger becomes too hot during charging, the power output is automatically reduced in order to protect the device from damage.



**The IBC battery charger will NOT start charging, without a charging mode being selected.**

1. Before charging the battery, connect the output terminals of the charger to the battery. Make sure all connections are tight and clean.
2. Make sure to choose the correct charging mode by pressing the Mode-button. A faulty selecting can cause problems and damages to your battery and car. Please see also your car's manual for determining the right mode.
3. Settings are made by pressing the "MODE-button" and stepping forward by pressing the button one step at a time, releasing the button when the required mode is reached. After a short amount of time the charging process begins.

## Stopping the Charging Process

Charging can be stopped at any time by disconnecting the supply cord.

## After Charging



**WARNING!** Disconnect the supply before making or breaking the connections to the battery. As the released gas is flammable, avoid naked flames, glowing or electrostatically charged material and sparks in the vicinity of the battery. Always provide adequate ventilation. Because of this risk of explosive gas, only connect and disconnect the battery leads when the mains supply is disconnected.

1. Unplug charger from the mains supply
2. Disconnect the negative charging lead (BLACK) from the negative post of the battery (marked -) or mass.
3. Disconnect the positive charging lead (RED) from the positive terminal post of the battery (marked +).
4. Clean and store battery charger.

If the charged battery is maintainable, wait some time until the bubbling stops. Inspect the liquid in each cell again and top up carefully with de-ionized or distilled water if necessary. Now replace the caps. Any surplus fluid around the cell tops should be wiped off carefully as it may be acidic. Avoid getting electrolyte on your skin or clothes. Use eye protection. Wash your hands carefully.

## TROUBLESHOOTING



**WARNING!** Do not open or disassemble the device. Attempting to service the unit yourself may cause the risk of electrical shock or fire. Please follow the safety instructions when working on the device.

In a few cases, the charging process will finish very quickly, but the battery is not fully charged or does not deliver the desired voltage or power. The reason for this case could be that the battery is broken and needs to be replaced. If the device doesn't work at all, an internal fuse might be blown. This happens always for a reason. Do not try to replace internal fuses yourself. The device has to be checked by the manufacturer or by an authorized service.

### ERROR DIAGNOSTICS



Error	Reason/Solution	
	Standard Charging Mode	The battery is not accepting a charge. Change charge mode to Recovery Mode.
	Recovery Mode	The battery cannot be recovered.
	Battery capacity is too high for the selected mode. Verify the battery capacity and charge mode.	
	Battery voltage is too high or too low for the selected mode. Verify the battery voltage and charge mode.	
Flashing 	Reverse polarity. Reverse the battery connections.	

## BATTERY MAINTENANCE AND CARE

It is essential to keep your battery regularly charged throughout the year, especially during the winter months. Low temperature reduces the effectiveness of your car battery and your motor oil is thicker. Engines are more 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:

### **Detecting faulty cells with a hydrometer (not possible with Lithium, sealed or maintenance-free batteries)**

Starter-batteries are usually made of several cells, with a nominal voltage of 2V per cell. If one of the cells is defective, the whole battery deteriorates. If, after several hours of charging, your battery is still flat, you should test the battery cells.

Using a hydrometer, which can be purchased from most motor accessory stores, you can check the specific gravity of the electrolyte in each cell. Take hydrometer readings from each cell in the battery. Put the fluid back into the cell after testing, taking care not to spill the fluid. If one reading is lower than the others, this could indicate a faulty cell. If necessary, get an auto-electrician to check your battery. In some cases a battery can be revived, but one faulty cell is enough to ruin your battery.

### **Care**

Sometimes the battery may appear flat, but the reason could simply be dirty or loose connections on your battery terminals. It is important to maintain the leads on a regular basis. Clean all contacts and grease them using terminal grease. Make sure that all connections are tight.

It is essential to keep the electrolyte level above the plates, note 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. If necessary have it checked by your garage.

## BLUETOOTH CONNECTION

### Connecting your IBC charger to your Bluetooth enabled smartphone

**Note:**

iOS 8.0 or later, or Android 4.4 or later and a mobile device with Bluetooth BLE Ver. 4.3 or later is needed to connect to the charger

1. Download and install the free "BT Charger 2.0" App from Apple App Store or Google Play Store.
2. Make sure Bluetooth is enabled on your smartphone.
3. Connect charger to the mains and make sure the unit is powered on.
4. Open "BT Charger 2.0" App.
5. Check the App's "Settings"- and take the desired settings you need (Background Refresh and Notifications)
6. Select the device you want to connect to. Make sure the section "Charger" is selected. You may want to connect more than 1 charger or battery tester.
7. Change the settings as required.

**Congratulations !**

Now you can control your battery charger and check the status of your battery in a very convenient way. The app is easy to use and gives you all the information you need to know about your battery status and your chargers parameters.

**Note:**

The app delivers only some information about the charging modes. Always use this manual as a reference, if you are unsure what mode to select.

**Password:**

If you have more than one charger, you may want to rename the device or set your own password for the connection. The password is automatically stored in the app. **The default password is: 123456**  
**If the Password is forgotten, you can reset the charger to the default password by pressing the MODE-button for more than 5 seconds.**

**Note:** The password of an optional Pro-User IBT Battery Tester is not changeable. It consists of the unique product key printed on the device

**Bluetooth Connection:**

If you put your smartphone to sleep or the Bluetooth connection was interrupted in another way, it is possibly required to wait for some seconds and to connect to the charger again (Pull to refresh the device list). Usually no password is required as the password is stored in the app.



Android



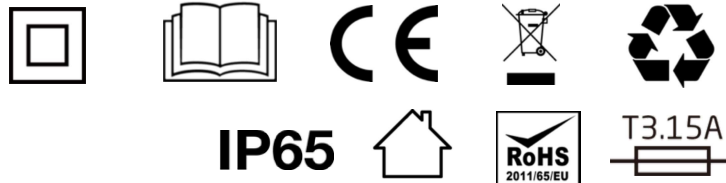
iOS

Model	IBC4000B	= MWLF-CC040LCDBT
	IBC7500B	= MWLF-CC075LCDBT
	IBC15000B	= MW LF-CC150ALCDBT
	IBC26000B	= MWLF-CC260ALCDBT
	IBT1	= MW337BT

## TECHNICAL SPECIFICATIONS

<b>Model</b>	<b>IBC15000B; 15A Battery Charger</b>
<b>Suitable Batteries</b>	
Suitable Battery Voltages	12V & 24V & 12.8V
Suitable Battery-Types and Battery's Capacities	12V & 24V Lead Acid Batteries, e.g. Wet, Gel, AGM and 12.8V 4-cells LiFePO4. The charger is suitable to charge... • 12 V : 50 - 400 Ah capacity • 24 V : 25 - 200 Ah capacity • 12.8V : 30 - 200 Ah capacity (4-cells LiFePO4 Lithium batteries)
<b>Electrical Values</b>	
AC Input	220V – 240V ~ 50Hz; max. 2A
Power Consumption	120W
Charging Current	15A for 12V battery 7.5A for 24V battery 5.0A for 13.6V Power Supply
(Charging) Voltages	Normal: 12.8 / 13.8 / 14.1 / 14.5V or 25.6 / 28.2 / 29.0VDC Cold/AGM: 12.8 / 14.1 / 14.7V or 25.6 / 28.2 / 29.4VDC AGM+ : 12.8 / 14.1 / 14.4 / 15.0V DC LiFePO4: 12.8 / 13.8/ 14.1 / 14.5V DC 13.6V Power Supply: 13.6V DC
Back Drain Current without AC Input	< 10mA
<b>Other</b>	
Protection class	IP65
Electrical Safeguards	Protection against: overheat, short-circuit, reverse polarity
Operating ambient temperature	0°C ~ 40°C
Ambient Storage Temperature	-30 °C ~ 60 °C

This model may be operated in EU countries.



## ENVIRONMENTAL PROTECTION



The product is classed as Electrical or Electronic Equipment and should not be disposed of with other household or commercial waste at the end of its working life. Please recycle where facilities exist. Ask your local authority or retailer for recycling advice.

## WARRANTY

Pro-User warrants this product for a period of 24 months 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. Pro-User is only responsible for repair or replacement (at Pro-Users' Discretion) of the defective product and is not responsible for any consequential damage or inconvenience caused by the defect.

## EINLEITUNG

Das intelligente Batterieladegerät IBC15000B ist ein zukunftsweisendes Ladegerät, hergestellt für die Firma Pro-User Electronics, welches die Leistung Ihrer Batterie verbessern und deren Lebensdauer

verlängern kann. Das IBC15000B intelligente Batterieladegerät mit Bluetooth-Funktion ermöglicht es Ihnen mit Hilfe der kostenlosen Pro-User App „BT Charger 2.0“ Ihre Batterie zusätzlich mit Ihrem Bluetooth-fähigen Smartphone zu überwachen und zu laden. (erfordert iOS 8.0 oder neuer & Android 4.4 oder neuer, sowie ein Smartphone mit Bluetooth BLE Ver. 4.3 oder neuer)

Permanente Qualitätskontrolle stellt sicher, dass Sie ein hochwertiges Produkt erhalten, das Ihnen hohe Zuverlässigkeit und Funktionalität bietet.

**Bitte lesen Sie die Bedienungsanleitung sorgfältig durch und befolgen Sie insbesondere die Sicherheitshinweise. Das Nichtbefolgen der Sicherheits- und Bedienungshinweise kann schwerwiegende Unfälle an Sachgegenständen und Personen zur Folge haben. Wird das Gerät an eine andere Person weitergegeben, so muss diese Bedienungsanleitung ebenfalls mit ausgehändigt werden.**

## WICHTIGE SICHERHEITSHINWEISE



**ACHTUNG:** Lesen Sie diese Bedienungsanleitung sorgfältig vor der Inbetriebnahme. Das Gerät darf nur von Personen benutzt werden, welche diese Anleitung vollständig gelesen und verstanden haben und sich mit den Eigenschaften des Geräts vertraut gemacht haben. Wenn Sie mit dem Umgang am elektrischen 12V/24V System Ihres Fahrzeugs nicht vertraut sind oder anderweitig unsicher sind, ziehen Sie professionelle Hilfe zu Rate, fragen Sie Ihren Fahrzeughersteller oder beauftragen Sie Ihre Werkstatt. Die Nichteinhaltung der Bedienungsanleitung und Sicherheitshinweise kann die Funktion des Geräts dauerhaft beeinträchtigen, Stromschläge begünstigen oder schwerwiegende Unfälle an Gegenständen und Personen zur Folge haben.

### **Lesen Sie die Bedienungsanleitung Ihres Fahrzeugs !**

Bei einigen Fahrzeugtypen sind möglicherweise besondere Vorkehrungen notwendig, bevor Sie die Fahrzeugbatterie laden dürfen (z.B. Sicherungen, die entfernt werden müssen oder bestimmte Sicherheitsvorkehrungen, die getroffen werden müssen).

Pro-User übernimmt keine Haftung für direkte oder indirekte Schäden, welche entstanden sind durch, Montage- oder Anschlussfehler, fehlerhafte oder unsachgemäße Verwendung, Verwendung eines modifizierten oder bekanntermaßen beschädigten Geräts, Verwendung außerhalb des "bestimmungsgemäßen Gebrauchs" oder Missachtung dieser Bedienungsanleitung.



**Versuchen Sie UNTER KEINEN UMSTÄNDEN** das Gerät an nicht unterstützten Batterietypen (z.B. NiCd-Batterien) zu betreiben oder zu einem anderen als dem vorgesehenen Zweck zu benutzen. Versuchen Sie nicht defekte Batterien zu laden. Das Ladegerät ist nicht als Starthilfe-Gerät ausgelegt. Das Nichtbefolgen dieser Anweisung könnte schwerwiegende Unfälle an Gegenständen und Personen zur Folge haben.



Dieses Ladegerät hat automatische Schutzschaltungen bei Überhitzung, Verpolung und Kurzschluss. Trotzdem empfehlen wir dringend Kurzschlüsse zwischen den Polzangen zu vermeiden oder die Batterie verpolt anzuschließen. Dies könnte gefährliche Funkenbildung, elektrische Blitze (Überschläge) oder sogar Explosionen verursachen. Schließen Sie die Batterieklemmen nur an, wenn die Stromversorgung des Ladegeräts unterbrochen wurde.



Das Gerät ist nur zum Gebrauch in Innenräumen vorgesehen. Das Laden von Batterien darf nur in trockener Umgebung stattfinden. Benutzen Sie das Gerät nicht in der Nähe von offenem Licht oder in explosiver Umgebung (wie z.B. in der Nähe brennbarer Gase und Flüssigkeiten oder feinem Staub). Beenden Sie umgehend jegliche Benutzung, wenn abnormes Verhalten auftritt, das Gerät sehr heiß wird oder gar Rauch austritt.