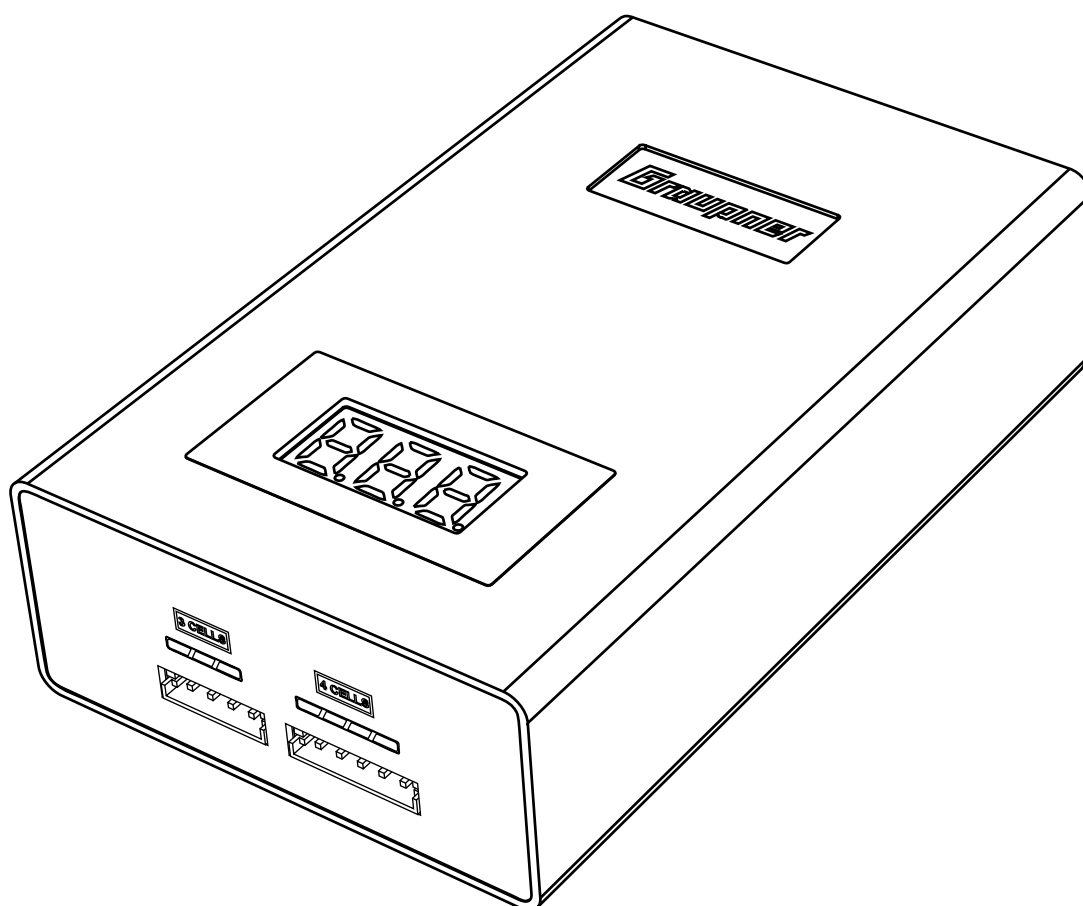


Manual

LiPo BALANCER CHARGER 3-4S

with integrated net adapter 100-240V AC

No. S2034



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Introduction

Thank you very much for purchasing a **Graupner LiPo BALANCER CHARGER 3-4S with net adapter 100-240V AC and separated connection cable**.

Read this manual carefully to achieve the best results with your LiPo battery charger and first of all to safely charge your batteries. If you experience any trouble during the charge operation, take the instructions to help or ask your dealer or **Graupner** Service Centre.

Due to technical changes, the information may be changed in this manual without prior notice. Be always updated by checking periodically on our website, **www.graupner.de** to be always uptodate with the products and firmwares.

This product complies with national and European legal requirements.

To maintain this condition and to ensure safe operation, you must read and follow this user manual and all the safety notes before using the product and you have to respect those notes also for future use!



Note

This manual is part of that product. It contains important information concerning operation and handling. Keep these instructions for future reference and give it to third person in case you gave the product.

Service centre

Graupner Central Service Graupner GmbH Henriettenstrasse 96 D-73230 Kirchheim / Teck	Servicehotline ☎ (+49) (0)7021/722-130 Monday- Thursday: 9:15 am- 4:00 pm Friday: 9:15 am- 1:00 pm ✉ service@graupner.de
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Graupner USA
3941 Park Dr Suite 20-571
El Dorado Hills, CA 95762

Website: www.graupnerusa.com
Phone: +1 855-572-4746
Email: service@graupnerusa.com

Graupner in Internet

For the service centres outside Germany please refer to our web site **www.graupner.de**.

Intended use

The **Graupner LiPo BALANCER CHARGER 3-4S** has to be used exclusively only for the scopes declared by the manufacturer. Any other type of use is impermissible and may cause significant property damage and/or personal injury. No warranty or liability is therefore offered for any improper use not covered by these provisions.

This charger is only suitable for charging a lithium-polymer battery with either three or four cells and a nominal cell voltage of 3.7 V.

Target group

The item is not a toy. It is not suitable for children under 14. The and operation of the battery charger must be performed by experienced modellers. If you do not have sufficient knowledge about dealing with LiPo battery chargers, please contact your dealer, an experienced modeller or a model club.

Disclaimer

Graupner/SJ cannot monitor compliance with the operating instructions, as well as the conditions and methods for installation, operation, use and maintenance of the charger. Therefore **Graupner/SJ** does not accept any liability for loss, damage or costs arising from improper use and operation or which are related to it in any way.

Package content

- LiPo BALANCER CHARGER 3-4S with integrated net adapter
- AC connection cable
- Manual

Technical data

Charger	
Input voltage	100 ... 240V~ (AC)
Suitable to charge	LiPo batteries 3S (11,1V)/4S (14,8V)
Admitted cells count	3 or 4 cells
Balancer ports Usable at the same time	2 1
Charge current	max. 3A (< 40W)
Light display	7 segment LED display
Balancer connection type	XH
Voltage difference at the balancer	approx. 20mV
Dimensions	Approx. 98 x 60 x 26 mm
Weight	Approx. 135 g

Symbol description

Always observe the information indicated by these warning signs. Particularly those which are additionally marked with the words **CAUTION** or **WARNING**.



The signal word **WARNING** indicates the potential for serious injury, the signal word **CAUTION** indicates possibility of lighter injuries.



The signal word **Note** indicates potential malfunctions.

Attention indicates potential damages to objects.

Safety notes



These safety instructions are intended not only to protect the product, but also for your own and other people's safety. Therefore please read this section very carefully before using the product!

- **Always pay attention to the charging instructions of the battery manufacturers and always observe the recommended charging currents and charging times.**
- **Do not carry out any fast charge as long as the manufacturer does not explicitly state that the batteries are suitable for this purpose.**
- **Lithium polymer cells are sensitive and can easily be damaged. Therefore, charge LiPo cells only with suitable charging devices and under permanent monitoring of the charging process.**
- **Protect the charger against dust, moisture, rain, heat (e.g. direct sunlight) and vibrations. Only use in dry locations.**
- **Not for children under 14 years, no toys!**
- **Persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, or not capable to use safely the battery charger must not use it without supervision or instruction by a responsible person.**
- **The slots in the housing are used to cool the device and must not be covered or sealed. The device must be positioned so that the air can circulate without restriction.**
- **Do not connect several chargers to one power strip. Otherwise, the socket can be overloaded and start to burn!**
- **The charger and the LiPo battery to be charged must be placed on a non-combustible, heat-resistant and non-conducting surface during operation. Never place the device on a car seat, carpets or similar surfaces. Combustible or highly flammable objects are to be kept away from the charging area. Ensure good ventilation.**
- **Batteries can explode or catch fire if they are defective!**
- **The charge outputs and the connection cables must not be modified or connected to each other in any way. The charging cables and connection cables must not become coiled during operation. Prevent short circuits between the charge output or battery.**
- **Only use the components and spare parts that we recommend. Always use matching, original *Graupner* plug-in connections of the same design and material.**

- **Make sure that all of the plug-in connections are tight. When disconnecting the plug-in connections, do not pull the cables.**
- **Never leave the charger unattended when it is connected to the power supply. Only use in rooms fitted with a smoke detector.**
- **Under no circumstances should both charge connections of the LiPo BALANCER CHARGER 3-4S be used as short-circuit-like effects can occur.**
- **If you have questions which cannot be answered by the operating manual, please contact us or another expert in the field.**
- **Avoid every kind of short-circuit in all sockets! Risk of fire! Use only the suitable connectors. In no case the electronic component of the charger may be changed or modified. Due to licensing reasons, any reconstruction and/or modification of the product is prohibited.**

For your safety by handling the batteries



CAUTION

- **Protect the batteries from dust, dirt, moisture, heat and vibrations. Only use in dry locations.**
- **Batteries must always be monitored during charging!**
- **Connect the battery to be charged using the original GRAUPNER XH balancer connection cables for lithium polymer cells.**
- **Do not use any damaged battery.**
- **Never try to load faulty or "puffy" lithium cells!**
- **Overcharging and deep-discharge processes cause irreparable damage to the cells, permanently impair the performance of the battery and reduce its capacity.**
- **Always ensure that all cables, plugs and terminals are well and securely connected. If, for example, a wobble contact causes a short interruption of the charging process, this inevitably leads to a malfunction, such as a restart of the charging process. The battery pack can be massively overcharged and, in the worst case, start to burn.**
- **Batteries may not be heated, burned, short-circuited.**
- **If handled improperly, there is a danger of fire, explosion, irritation and burns.**
- **Leaked electrolyte is caustic and should not be touched or come into contact with your eyes. In case of emergency, rinse with a large quantity of water and consult a Med. Doctor.**
- **Stock the batteries in dry and fresh conditions.**
- **Dispose of the battery in the proper disposal centers.**

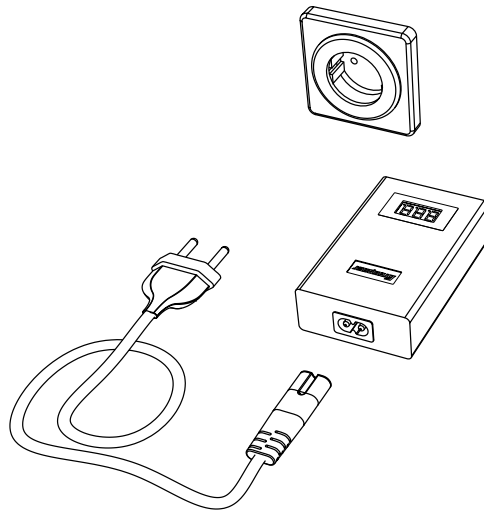
First use

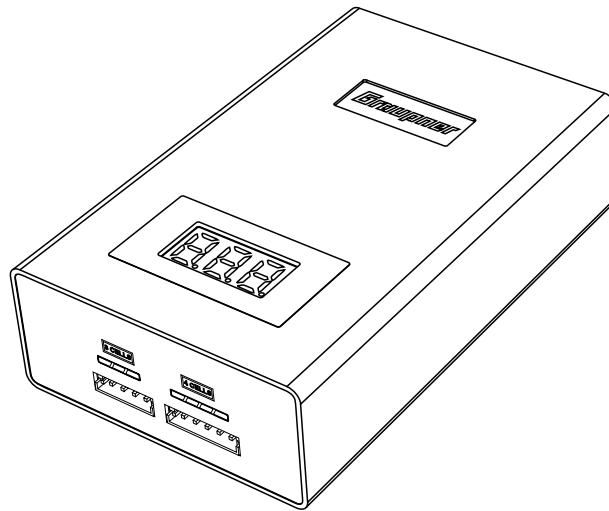
Charging LiPo batteries

Lithium batteries may ONLY be charged with suitable charger type. Chargers or charging methods for NiCd or NiMH batteries are not suitable for charging LiPo batteries since the respective charging methods differ considerably. Also, LiPo chargers balance the cell voltages during charging, they "balance" them. A technique which is not used, for example, when charging NiCd or NiMH batteries.

The required charging current depends on the charge state and on the capacity of the battery to be charged and is automatically determined by the charger as a rule.

Components description





5 6

1	Net power adapter	admitted input voltage 100 ... 240V ~ (AC) Output power 15V / 15W
2	Charger input	admitted input voltage 100 ... 240V ~ (AC)
3	7 segment LED display	FUL lights up after full charge
4	7 segment LED display	Battery voltage lights up during charging
5	Balancer socket	left: for 3 cells batteries
6	Balancer socket	right: for 4 cells batteries
	AC connection cable	
7	Charger-side connector	admitted operation voltage 100 ... 240V ~ (AC)

Charging mode with net power supply



Step by step



Attention

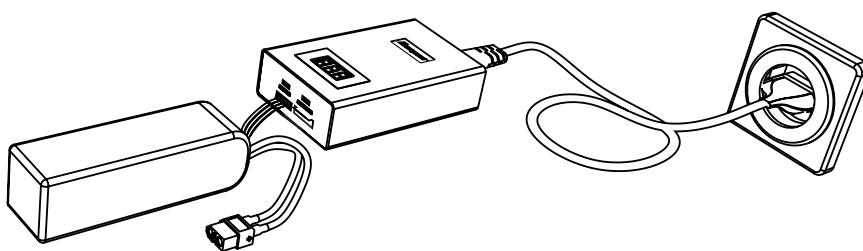
Only one battery can be charged on the charger at a time. Never plug in two batteries at the same time, this will destroy the charger and the batteries.

Connect the power cord of the supplied charger to the charger to a suitable 100V- 240V source.

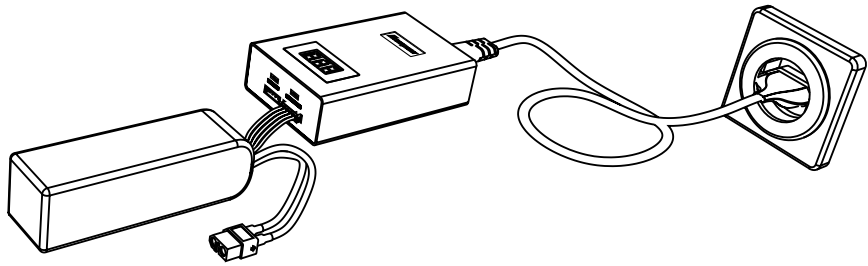
- 1.) The display on the charger shows the numbers 
- 2.) Connect either a 3S battery with its white balancer plug to the charger to the left 3S charging socket or a 4S battery with its white balancer plug to the right 4S charging socket.
- 3.) The display then shows the battery voltage (charging mode).
- 4.) When the charging process is complete, the display alternates between the battery voltage and the display . Then the battery is fully charged.
- 5.) Unplug first the battery connector from the charger and then the connection cable from the power supply.

1. The red LED starts to light up and lights up constantly further until the end of the charge process.
2. If the red LED gets off and the green one lights up, the charge process is completed.

Connection example of a 3 cells LiPo battery



Connection example of a 4 cells LiPo battery



Notes

- The batteries shown in the two connection examples are not included with the charger.
- After charging, remove the LiPo battery to be charged from the charger for safety reasons.
- Disconnect the charger from the power supply after charging.
- Do not place anything on the charger during charging.
- The admitted temperature range is from 0 to 40 ° C. The optimum charging power is within 10 and 30 ° C.
- If there are consistent voltage differences between the individual cells of the LiPo battery to be charged, the charging time can be extended.



SIMPLIFIED DECLARATION OF CONFORMITY

Graupner/SJ hereby declares that the product **LiPo Balancer Charger 3-4S S2034** complies with the directives 2014/30/EU EMV and 2014/35/EU LVD.

The full text of the EU Declaration of Conformity is available at the following Internet address: **www.graupner.de**

Manufacturer

Graupner Co., Ltd

Post Code: 14557

8th F, 202 Dong, Chunui Techno-Park II, 18, 198 Street

Bucheon-ro, Wonmi-Gu, Bucheon-Shi, Gyeonggi-do

South Korea

Notes on environmental protection



If this symbol is on the product, instructions for use or packaging, it indicates that the product may not be disposed with normal household waste once it has reached the end of its service life. It must be turned over to a recycling collection point for electric and electronic apparatus.

Individual markings indicate which materials can be recycled. You make an important contribution to protection of the environment by utilizing facilities for reuse, material recycling or other means of exploiting obsolete equipment.

Care and maintenance



The product does not need any maintenance. Always protect it against dust, dirt and moisture.

Clean the product only with a dry cloth (do not use detergent!) lightly rub.

Warranty conditions

Graupner/SJ GmbH, Henriettenstrasse 96, 73230 Kirchheim/Teck grants from the date of purchase of this product for a period of 24 months. The warranty applies only to the material or operational defects already existing when you purchased the item. Damage due to misuse, wear, overloading, incorrect accessories or improper handling are excluded from the guarantee. The legal rights and claims are not affected by this guarantee. Please check exactly defects before a claim or send the product, because we have to ask you to pay shipping costs if the item is free from defects.

These operating instruction are exclusively for information purposes and are subject to change without prior notification. The current version can be found on the Internet at **www.graupner.de** on the relevant product page. In addition, the company ***Graupner/SJ*** has no responsibility or liability for any errors or inaccuracies that may appear in construction or operation manuals.

Not liable for printing errors.

