

# LIPO COMPETITION CAR LINE

**3C CHARGE CURRENT  
UP TO 110C/55C  
DISCHARGE CURRENT**



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## HIGH-PERFORMANCE HARDCASE POWERPACKS

WWW.LRP.CC

### Dear customer,

thank you for your trust in this LRP product. By purchasing a LRP Competition Car Line Hardcase LiPo battery, you have chosen a high-performance battery for your RC model. Please read the following instructions to ensure, that your LRP Competition Car Line Hardcase LiPo battery always works up to your full satisfaction.

LiPo-batteries need special treatment and care. Please read the following instructions carefully before you start using your LRP Competition Car Line Hardcase LiPo battery. This user guide contains important notes for the installation, the safety, the use and the maintenance of this product. Thus protecting yourself and avoid damages of the product.

Proceed according to the user guide in order to understand your LRP Competition Car Line Hardcase LiPo battery better. Please take your time as you will have much more joy with your product if you know it exactly.

**This user manual shall be kept in a safe place. If another customer is using this product, this manual has to be handed out together with it.**

### 1. STOCK SPEC AND LCG LINE

Along with the standard Competition Car Line hardcase battery line, LRP introduces two brand-new Competition battery lines that are specially developed for the needs of current racing classes.

The **LCG - Low Center of Gravity** line has been designed to get the maximum out of your racing cars. These batteries are tailor-made for specific racing classes and a must-have for serious racing drivers.

The LCG Touring car battery pack will lower the center of gravity of your TC car by using a lower hardcase and lighter cells. This will result in higher cornering speed and faster reactions on steering inputs.

The LCG Saddle Pack and LCG Shorty batteries are tailor-made batteries for 1/10 Off-Road cars. They feature a lower hardcase together with a much lighter cell weight that will make your Off-Road car jump better, corner faster and create more traction. They will also give you the possibility to use additional weights that can be shifted around in your car to meet your personal driving style.

**ATTENTION:** The LCG Saddle Pack and LCG Shorty battery packs are designed to be used in 1/10 Off-Road cars on slippery surfaces. Do not use these types on high grip surfaces or other racing classes.

The Stock Spec line has been specially developed for stock racing classes. It features the highest possible voltage output for maximum speed and acceleration. The low internal resistance of these batteries will give you more punch and higher topspeed than the standard batteries. This is essential for stock racing classes where capacity is nothing and power is everything.

The **Stock Spec** line features a standard Sub-C size battery pack for Touring Car racing classes and a Shorty pack for Off-Road racing classes.

**ATTENTION:** We do not recommend to use the Stock Spec line batteries for modified racing classes as the power characteristics of these batteries might be to aggressive.

### 1. Connections

All LRP Competition Car Line Hardcase LiPo packs have 4mm gold plug sockets built into the battery pack. These power connections have to be used for standard charging and for all applications in the model/device. Be sure to always take care of the right polarity, which is shown on the hardcase of the battery, as a wrong connection will damage your battery and your speedo. While soldering, take care that you don't do any short circuits and that all wires are well insulated.

Additionally to the 4mm gold plug sockets, all LRP Competition Car Line Hardcase LiPo packs, except the 1S packs, use a 2mm gold plug socket, which acts as a cell connection between the two cells in the pack. The 3S packs are equipped with a so-called XHR-Balancing-port. This connection can be used for balancing the cells as well. This connection is used for balancing the LRP Competition Car Line Hardcase LiPo pack.

Special balancers or certain chargers use this balancing port to perfectly condition and equalize the individual cells inside the pack. Please check the user manual of the balancer/charger in order to know how the battery needs to be hooked up. For perfect charging and conditioning of the batteries, we recommend our LRP PULSAR TOUCH COMPETITION (No. 41556).

**NOTE:** The Balancing-port shall not be used for the standard use in the model/device. Only use the 4mm gold plug sockets to power your model/device.

For perfect conditioning of your LRP Competition Car Line Hardcase LiPo pack, we recommend the use of our LRP PULSAR TOUCH COMPETITION charger (No. 41556). Together with the 2S LiPo Hardcase charging wire (No. 65821) or the 1S LiPo Hardcase charging wire (No. 65829) and one of our LRP LiPo Safe Box (No. 65848), your battery will always have the best possible performance.

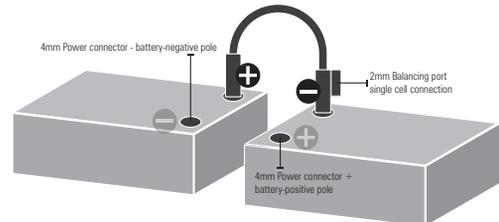
#### Balancing-port (2S - 7.4V packs)

4mm gold plug socket (battery -)	Cell 1-
2mm gold plug socket (cell conn.)	Cell 1+ (Cell 2-)
4mm gold plug socket (battery +)	Cell 2+

#### Balancing-port 4-pole (3S - 11.1V packs)

Black (Battery-Negative)	Cell 1-
Brown (cell connection 1)	Cell 1+ (Cell 2-)
Orange (cell connection 2)	Cell 2+ (Cell 3-)
Red (Battery-Positive)	Cell 3+

The saddle-pack connecting wire has to be plugged in between the battery-negative pole of one saddlepack halve and the battery-positive pole of the other saddle-pack halve.



### 2. Charging

Due to new and special manufacturing technologies, all LRP Competition Car Line Hardcase LiPo batteries can be charged with a maximum current of 3C\*. For charging, only use chargers, which are specially designed and developed for LiPo-batteries. These chargers charge the battery with the max. current till the battery reaches the max. charging voltage. The charger then reduces the charging current until the battery is fully charged. This charging method is called CC/CV (Constant Current/Constant Voltage). For charging the LRP Competition Car Line Hardcase LiPo batteries, we recommend our LRP PULSAR TOUCH COMPETITION (No. 41556).

**ATTENTION:** Under no circumstances use NiMH/NiCd-chargers or chargers, that are set to NiMH/NiCd mode, for charging LiPo-batteries! These chargers do not reduce the charging current and therefore ultimately lead to overcharging the battery! Only use chargers that have an automatic end of charge cut-off and are specially designed for radio controlled model batteries. Do not use timer chargers.

LRP Competition Car Line Hardcase LiPo batteries do not heat up during charging. It is normal, that the battery still has ambient temperature when it is fully charged. If the battery heats up during charging or warps, immediately stop charging it. A balancer which monitors the voltage of each single cell is mandatory during the charge of LiPo batteries.

**ATTENTION:** Never charge your LiPo battery without a balancer directly connected to the balancing port of your battery, unless your charger is already equipped with a balancer. Always charge your battery outside of your model!

The maximum charging voltage for each single LiPo-cell is 4.20V. If the battery reaches this voltage, the charge current has to be lowered. This is automatically done by the charger. If the charge current reaches 0.05 - 0.1C\*, the battery is fully charged. Some LRP Competition Car Line Hardcase LiPo batteries consist of multiple LiPo-cells. You can see the max. charging voltage in the table below. We advise the following settings for charging our LRP Competition Car Line Hardcase LiPo batteries:

Cell configuration	max. charge current	recommended charge current	max. charging voltage
LRP Competition Car Line - 1S - 3.7V	3C*	12A	4.20V
LRP Competition Car Line - 2S - 7.4V <400mAh	3C*	6A	8.40V
LRP Competition Car Line - 2S - 7.4V >400mAh	3C*	12A	8.40V
LRP Competition Car Line - 3S - 11.1V	3C*	12A	12.60V

**PLEASE NOTE:** You can use your LRP Competition Car Line Hardcase LiPo battery several times a day. However be sure, that the battery has completely cooled down to ambient temperature, before re-charging it again.

LRP Competition Car Line Hardcase LiPo batteries do not have a memory effect and only a very low self-discharge rate. Therefore you can also charge batteries with a partial charge in them, without the need of discharging the pack before. Partially charged packs can be stored over a long period of time, without getting damaged. Please also see the „Storage“ section for further reference.

\* C=Nominal capacity of the battery. E.g. with a nominal capacity of 7000 mAh (7.0Ah), the battery can be charged with a max. current of 21.0A.

### 3. Discharging

All LRP Competition Car Line Hardcase LiPo batteries are capable of a maximum peak



discharge current of 110C (55C/110C types) or 80C (40C/80C types). The special manufacturing technology of the LRP Competition Car Line Hardcase LiPo batteries make these high discharge currents possible. Be sure that the battery temperature is not below 18°C (65°F) if you run it in your model as the high discharge load will hurt the performance and the cycle life of your battery if it is below this temperature.

**PLEASE NOTE:** Always take care that the battery gets enough cooling when discharging it with high discharge currents.

You have to take care, that the batteries do not get deep discharged. As soon as the battery voltage falls below 3.3V per single cell, the battery pack gets damaged irrevocably. With 2S packs, the discharge cut-off voltage under load is 6.6V. With 1S packs, the discharge cut-off voltage under load is 3.3V. With 3S packs, the discharge cut-off voltage under load is 9.9V. The battery voltage should never fall below these discharge cut-off voltages. If your speed control does not have a special undervoltage protection for LiPo-batteries, you have to stop your model early enough in order not to deep discharge the battery pack. Therefore stop immediately as soon as you feel a rapid loss in power.

**IMPORTANT:** The max. temperature of the LiPo-battery during discharge must never exceed 65°C (150°F).

**NOTE:** If the batteries do swell or get thick after discharging them, it is a sign of overload and/or deep-discharge. The battery pack gets damaged due to this and the max. performance will get less. Swollen battery packs are not a product fault and therefore excluded from the limited warranty.

#### 4. Special notes for handling

- Make sure to set your electronic speed control cut-off voltage to the correct LiPo battery voltage, depending on the battery you are using. A wrong cut-off voltage can lead to deep-discharging the battery, which damages it battery irrevocably.
- Avoid short-circuits! Short-circuiting the battery results in very high currents, which damage the internal structure of a LiPo-battery. This leads to a loss of power and capacity.
- Never charge LiPo batteries without a balancer. Charging without a balancer can damage the battery. Please note, that your limited warranty will void if you charge without balancer.
- Be sure, not to damage the outside of the LiPo-battery. The battery is only protected by a heatshrink. The actual Lipo-cell is directly under this heatshrink. If the outer skin of the cell gets damaged, the battery can no longer be used. Therefore take special care, that no sharp objects like knives, tools, carbon fibre edges or similar items can damage the hardcase and/or the cells within it.
- When securing the LiPo-battery inside your model/device, you have to take care that the LiPo-battery does not get damaged or warped in case of a crash. LiPo-batteries are less mechanical resistant than NiMH-batteries in a metal can. Therefore pay special attention that the LiPo-battery does not get damaged or warped by letting it fall down, hitting it, bending it or by similar actions.
- Never charge several LiPo-battery packs at once with one charger. The different capacities and charge levels can lead to serious overcharging of the battery, even if you are using a charger with LiPo capabilities.
- Damaged packs cannot be used any longer. If the packs show signs of damage, are bent or similar, do not use the packs anymore.
- The chemical reaction during charging and discharging a LiPo-battery is not fully reversible. Due to that, LiPo-batteries loose capacity during their life-span. This is normal and neither a manufacturing nor production fault.

**DISPOSAL NOTE:** Damaged packs or packs, which can no longer be used are hazardous waste and have to be disposed of accordingly.

#### 5. Storage !!!

For a storage over a longer period of time, we recommend to charge the battery up to 50% of the nominal capacity. Therefore fully discharge the battery pack and then partially charge it with a charge current of 1C for 30 minutes or charge it up to a voltage of 3.85-3.90V/cell. In this condition, the battery can be stored at least 3 months at 25°C room temperature without the need of recharging it. If the batteries are stored longer, be sure to make a complete charge and discharge cycle every 3 months and partial charge it again for storage. We also recommend this procedure before the first use in a model after the battery has been stored for 2-3 months or longer.

**ATTENTION: NEVER STORE THE BATTERY COMPLETELY EMPTY OR FULLY CHARGED. Both will harm the battery and lead to swollen battery cells. A fully charged battery will have the same negative effects as a completely discharged battery.**

Even if you are using your battery regularly every week, always pay attention that the battery is partially charged with at least 30% of the nominal capacity during storage. A partial charge with 1C charge current for 20 minutes is sufficient in this case, if the battery was completely empty before.

For storing, we recommend to use our LRP LiPo Safe Box (No. 65848). If you pay attention to the above mentioned notes, you can enjoy your LRP Competition Car Line Hardcase LiPo batteries for a very long time.

#### 6. Interesting facts about Lipo batteries

- LiPo batteries shall only be charged at a temperature between 0-45°C. If this will not be observed, the cycle life of the battery will be reduced drastically.
- The single cell open circuit voltage of a fully charged LiPo battery is 4.2V. The single cell open circuit voltage of a 50% partial charged LiPo battery is approx. 3.85V. The single cell open circuit voltage of an empty LiPo battery is approx. 3.3V.
- A voltage below 3.3V per cell without load is in either case harmful for a LiPo battery. Therefore always avoid voltages below 3.3V per cell.
- It is not visible from the outside when a LiPo battery gets overcharged. The only way to find this out is to measure the voltage of the LiPo battery. The battery does not heat up nor does it swell when it gets overcharged. Therefore always check the battery voltage during charging. If it exceeds the max. charging voltage stop the charging process immediately and check all settings.
- We recommend to stop discharging a Lipo battery if the remaining capacity reaches 30% of the nominal capacity. With this, LiPo batteries will have the max. possible cycle life. Real-Life application showed, that the cycle life of LiPo batteries is reduced if the battery always gets completely discharged. This phenomenon can be seen with all types of LiPo batteries.

#### Repair procedures / limited warranty

All products from LRP electronic GmbH (hereinafter called "LRP") are manufactured according to the highest quality standards. LRP guarantees this product to be free from defects in materials or workmanship for 90 days (non-european countris only) from the original date of purchase verified by sales receipt. This limited warranty doesn't cover defects, which are a result of misuse, improper maintenance, outside interference or mechanical damage. This especially applies on already used batteries or batteries, which show signs of heavy usage. Damages or output losses due to improper handling and/or overload are not a product fault. Signs of wear (loss of capacity) after intensive usage are also no product fault.

To eliminate all other possibilities or improper handling, first check all other components in your model and the trouble shooting guide, if available, before you send in this product for repair. If products are sent in for repair, which do operate perfectly, we have to charge a service fee according to our pricelist.

With sending in this product, the customer has to advise LRP if the product should be repaired in either case. If there is neither a warranty nor guarantee claim, the inspection of the product and the repairs, if necessary, in either case will be charged with a fee at the customers expense according to our price list. A proof of purchase including date of purchase needs to be included. Otherwise, no warranty can be granted. For quick repair- and return service, add your address and detailed description of the malfunction. If LRP no longer manufactures a returned defective product and we are unable to service it, we shall provide you with a product that has at least the same value from one of the successor series.

The specifications like weight, size and others should be seen as guide values. Due to ongoing technical improvements, which are done in the interest of the product, LRP does not take any responsibility for the accuracy of these specs.

LRP-Distributor-Service: - check [www.lrp.cc](http://www.lrp.cc)



# WARNING NOTES

## deutsch

Kein Spielzeug. Nicht für Kinder unter 14 Jahren geeignet. Bewahren Sie das Produkt außerhalb der Reichweite von kleinen Kindern auf. Beachten Sie unbedingt die folgenden Hinweise, da diese Ihr Produkt zerstören können und die Gewährleistung ausschließen. Nichtbeachtung dieser Hinweise können zu Sach- und Personenschäden und schweren Verletzungen führen! Vermeiden Sie falschen Anschluss oder Verpolung des Produkts. Alle Kabel und Verbindungen müssen gut isoliert sein. Kurzschlüsse können unter Umständen das Produkt zerstören. Entnehmen Sie immer den Akku aus Ihrem Produkt bzw. trennen Sie das Produkt von der Stromquelle, wenn das Produkt nicht verwendet wird. Laden Sie den Akku immer außerhalb des Produktes auf, für den Sie den Akku benutzen möchten. Sollte der Akku einen Defekt haben, kann dies zu einer Beschädigung des Produkts führen. Vermeiden Sie Kurzschluss, Überladung und Verpolung des Akkus oder einzelner Zellen. Dies kann zu Brandentwicklung oder Explosion führen. Öffnen Sie niemals einen Akku, eine Batterie oder einzelne Zellen. Laden Sie den Akku nur unter Aufsicht. Während der Ladung muss sich der Akku auf einer nicht brennbaren, hitzebeständigen Unterlage befinden. Desweiteren dürfen sich keine brennbaren oder leicht entzündlichen Gegenstände in der Nähe des Akkus befinden. Überschreiten Sie unter keinen Umständen den maximalen Lade-/Entladestrom, der empfohlen wird. Unter keinen Umständen darf ein NiMH/LiPo-Akku tieferentladen werden. Der Akku darf nicht mit Feuer, Wasser oder anderen Flüssigkeiten in Berührung kommen. Ladevorgang nur in trockenen Räumen durchführen. Verwenden Sie für die Ladung von LiPo-Akkus nur Lade-/Entladegeräte, die für diesen Akkutyp spezifiziert wurden. Verwenden Sie keinesfalls NiCd/NiMH Lade-/Entladegeräte. Die Aussenhaut des LiPo-Akkus darf nicht beschädigt werden. Achten Sie also unbedingt darauf, dass keine scharfen Gegenstände wie Messer, Werkzeuge, Kohlefaserserkanten oder Ähnliches den Akku beschädigen können. Achten Sie darauf, dass der Akku nicht durch Herunterfallen, Schlagen, Verbiegen oder Ähnliches beschädigt wird. Beschädigte Zellen dürfen nicht mehr verwendet werden. Sollten die Zellen Verformungen, optische Beschädigungen oder Ähnliches aufweisen, so dürfen Sie diese nicht mehr verwenden. Der Hersteller kann nicht für Schäden verantwortlich gemacht werden, die infolge von Nichtbeachtung der Sicherheitshinweise und Warnungen verursacht werden. Achten Sie beim Laden von LiPo Akkus darauf, dass sich der Lader im LiPo Lademodus befindet. Bei zu starker Erwärmung einzelner Zellen im Akkupack den Ladevorgang sofort unterbrechen.

## english

No toy. Not suitable for children under 14 years. Keep the product out of the reach of children. Pay close attention to the following points, as they can destroy the product and void your warranty. Non-observance of these points can lead to property damage, personal and severe injuries! Avoid incorrect connections or connections with reversed polarity! Avoid incorrect connections or connections with reversed polarity of the product. All wires and connections have to be well insulated. Short-circuits can possibly destroy the product. Always remove the battery from your product or disconnect the product from the power source, if the product is not in use. Always charge the battery outside of the product you want to use. The product could get damaged, if a battery defect occurs. Avoid short circuits, overcharging and reverse polarity of the battery or single cells. This can lead to fire or explosion. Never open a battery or a single cell. Never leave the battery unattended while charging. During charging, the battery has to be kept on a non-flammable, heat-resistant mat. Furthermore no flammable or highly inflammable objects may be close to the battery. Never exceed the maximum charge/discharge current, which is recommended. Under no circumstances a NiMH/LiPo-battery shall be deep discharged. The battery may never get in touch with fire, water or other liquids. Only charge in a dry place. Only use chargers and dischargers, which are specified for LiPo-batteries by the manufacturer. Never use chargers or dischargers, which are specified for NiCd/NiMH-batteries! The outside of the LiPo-battery must not be damaged. Therefore take special care, that no sharp objects like knives, tools, carbon fibre edges or similar items can damage the battery. Pay special attention that the LiPo-battery does not get damaged or warped by letting it fall down, hitting it, bending it or by similar actions. Damaged packs cannot be used any longer. If the packs show signs of damage, are bent or similar, do not use the packs anymore. The manufacturer can not be held responsible for damages, which are a result of non-observance of the warning notes and security advices. Pay attention, that the charger is set to LiPo charge mode when charging a LiPo battery. If individual cells in the battery pack heat up excessively, immediately stop the charging process.

## französisch

Le produit n'est pas un jouet. Ne convient pas pour les enfants de moins de 14 ans. Ranger le produit hors de portée des enfants en bas âge. Absolument respecter les consignes ci-dessous sous peine de détruire le produit et d'annuler la garantie. Le non-respect de ces consignes peut être à l'origine de dommages matériels et personnels ainsi que de graves blessures ! Éviter tout branchement incorrect ou polarisation du produit. Tous les câbles et raccords doivent être correctement isolés. Dans certains cas, les courts-circuits peuvent détruire le produit. Toujours retirer l'accu du produit ou débrancher le produit de la source de courant lorsqu'il n'est pas utilisé. Si l'accu est chargé, évitez de le laisser sur le produit. Éviter tout court-circuit, surcharge et polarisation de l'accu ou de différents éléments. Ceci peut provoquer un incendie ou une explosion. Ne jamais ouvrir un accu, une pile ou un élément. Ne jamais laisser se charger sans surveillance. Pendant le chargement, l'accu doit être installé sur une surface ininflammable et résistante aux températures élevées. Il convient en outre de proscrire tous objets combustibles ou aisément inflammables à proximité de l'accu. Absolument proscrire tout dépassement du courant de charge/décharge recommandé par un accu NiMH/LiPo. L'accu ne doit jamais entrer en contact avec des flammes, de l'eau ou tout autre liquide. Uniquement effectuer les recharges dans des locaux secs. Uniquement recharger des accu LiPo avec des chargeurs/déchargeurs spécifiés pour ce type d'accu. Ne jamais utiliser des chargeurs/déchargeurs NiCd/NiMH. La surface externe de l'accu LiPo ne doit pas être endommagée. Il faut donc absolument veiller à ne pas endommager l'accu avec des objets tranchants tels que couteau, outil, chants en fibres de carbone ou autres. Veiller à ne pas endommager l'accu par une chute, un choc, une torsion ou autre. Ne plus utiliser des éléments endommagés. Si les éléments sont déformés, visiblement endommagés ou autrement altérés, ils ne doivent plus être utilisés. Le constructeur ne saurait être tenu responsable pour les dommages causés par le non respect des consignes de sécurité et des avertissements. Veiller à ce que le chargeur soit réglé sur le mode de chargement LiPo pour charger des accu LiPo. Si différents éléments du bloc d'accu chauffent exagérément, immédiatement interrompre le chargement.

## spanisch

Este aparato no es un juguete. No apto para niños menores de 14 años. Mantenga este producto fuera del alcance de los niños. Por favor, observe las siguientes indicaciones explícitamente, ya que de lo contrario el aparato podría sufrir daños o se podría anular la garantía. ¡La no observancia de estas indicaciones puede provocar daños personales y materiales, así como graves lesiones! Evite realizar conexiones erróneas y una polarización inversa del producto. Todos los cables y conexiones deben haber sido aislados correctamente. De lo contrario podrían producirse cortocircuitos y destruir el aparato eventualmente. Extraiga siempre las pilas del aparato o desconéctelo de la red si no va a utilizarlo. Cargue la pila siempre fuera del aparato en el que debe estar instalado. En caso de que la pila fuera defectuosa podría ocasionar daños en el aparato. Evite que se produzcan cortocircuitos y polaridad inversa en las pilas o células individuales. De lo contrario podría producirse una explosión o un incendio. No abra nunca un acumulador, una pila ni una célula. Cargue la pila bajo vigilancia. Coloque el aparato sobre una superficie resistente al calor y no inflamable durante el proceso de carga. Así mismo no deben encontrarse objetos combustibles ni inflamables cerca de la pila. No sobrepase bajo ninguna circunstancia la corriente de carga / descarga máxima recomendada por. No descargue nunca una pila NiMH/LiPo totalmente. Evite que la pila entre en contacto con fuego, agua o cualquier otro tipo de líquidos. Cargue la pila exclusivamente en descargas secas. Cargue las pilas LiPo exclusivamente con cargadores / descargadores adecuados para este tipo de pila. No utilice bajo ninguna circunstancia cargadores / descargadores NiCd/NiMH. Evite que el exterior de la pila LiPo sufra daño alguno. Por favor, observe que la pila no pueda ser dañada por objetos puntiagudos como son cuchillos, herramientas, aristas de fibra de carbono u objetos similares. Observe que la pila no sufra daños por caídas al suelo, golpes, dobbladuras o causas similares. No utilice nunca pilas dañadas. No utilice las pilas en caso de presentar deformaciones, tener el aspecto de ser defectuosas etc... El fabricante no asume la responsabilidad por daños ocasionados por la inobservancia de las medidas de seguridad y advertencias. Si desea cargar pilas LiPo, debe observar que el cargador se encuentre en el modo de carga para pilas LiPo. Si las pilas individuales se sobrecalientan en el acumulador, interrumpa inmediatamente el proceso de carga.

## italienisch

Non è un giocattolo. Non adatto a ragazzi sotto i 14 anni. Conservare il prodotto fuori dalla portata di bambini piccoli. Attenersi alle seguenti avvertenze per non danneggiare il prodotto e per non farne cadere la garanzia. La mancata osservanza delle presenti avvertenze può provocare danni a cose e persone e causare lesioni gravi. Evitare collegamenti errati o inversioni di polarità del prodotto. Tutti i cavi e i collegamenti devono essere ben isolati. Eventuali corti circuiti possono danneggiare il prodotto. Se non si utilizza il prodotto, rimuovere l'accumulatore o scollegare il prodotto stesso dalla fonte di alimentazione elettrica. Caricare sempre l'accumulatore staccato dal prodotto, su cui va utilizzato. Se l'accumulatore presentasse un guasto, infatti, esso potrebbe causare il danneggiamento del prodotto stesso. Evitare corto circuiti, sovraccarichi e inversioni di polarità dell'accumulatore o delle singole celle. Ciò può provocare sviluppo di incendi o esplosione. Non aprire assolutamente un accumulatore, una batteria o singole celle. Non lasciare incustodito l'accumulatore quando è in carica. Quando l'accumulatore è in carica deve poggiare su una base non infiammabile e termoresistente. Inoltre, nelle vicinanze dell'accumulatore, non ci devono essere oggetti infiammabili o facilmente combustibili. Non superare assolutamente la corrente massima di carico/carico consigliata da. Un accumulatore NiMH/LiPo non deve mai essere scaricato completamente. L'accumulatore non deve entrare in contatto con fiamme, acqua o altre sostanze liquide. Il processo di carica va effettuato solo in luoghi asciutti. Per caricare accumulatori LiPo utilizzare solo apparecchi di carica/carica specifici per questo tipo di accumulatori. Non utilizzare assolutamente apparecchi di carica/carica NiCd/NiMH. L'investimento esterno dell'accumulatore LiPo non deve essere danneggiato. Prestare attenzione affinché oggetti acuminati, quali coltelli, utensili, bordi in lega di carbonio o simili, non danneggino l'accumulatore. Prestare attenzione affinché l'accumulatore non subisca danni dovuti a cadute, urti, incurvature o simili. Le celle danneggiate non si possono più utilizzare. Se le celle presentano deformazioni, danni ottici o simili, non si devono più utilizzare. Il costruttore non è responsabile in danni causati dalla mancata osservanza delle norme di sicurezza e degli avvisi. Quando un accumulatore LiPo è sotto carica, controllare che il caricatore si trovi in modalità di carica LiPo. In caso di riscaldamento eccessivo delle singole celle dell'accumulatore, interrompere immediatamente il processo di carica.

## japanisch

道具ではありません。14歳以下の子供には不適です。子供の手の届かない場所に保管してください。製品を損傷し、また、保証対象外となるため、以下の点に注意してください。これらの点を遵守しなかった場合、製品の損傷、人体への怪我につながる可能性があります。誤った接続あるいは製品の極性の逆による接続は避けてください。全ての配線および接続は絶縁しておく必要があります。ショート、過充電や電池の逆の接続あるいは単一電池を避け、電池の故障が発生した場合は、製品を電源から切断し、適切に捨ててください。充電中、電池が過熱して火のそばに置かれてはなりません。更に、電池の近くに燃やしやすい物や引火性のものは置かずにください。社によって推奨されている最大充電電流を超えてはいけません。どのような場合においても、NiMH/LiPo電池は過充電してはいけません。充電する場合は、乾燥した場所で行ってください。メーカーによるLiPo電池の使用に指定された充電器や放電器のみを使用してはいけません。NiCd/NiMH電池用に指定されたものは使用してはいけません。LiPo電池の外側が損傷していない限り、ナイフ、工具、カーボンファイバーの線などの鋭利な物を電池を損傷しないよう注意してください。LiPo電池が落下し、衝撃や同様の行為によって損傷あるいは変形してしまえば、そのままにせず、損傷した電池は使用しないでください。損傷がある場合は、または変形している場合は、使用を中止してください。メーカーは警告文や安全についてのアドバイスを守らなかった理由による損傷については責任を負いかねます。LiPo電池を充電する際には、充電器がLiPo充電モードになっていることに注意してください。電池パック内の個別の電池が過度に熱くなる場合、充電を直ちに止めてください。

## griechisch

Δεν είναι παιχνίδι. Ακατάλληλο για παιδιά ηλικίας μικρότερης των 14 ετών. Φυλάξτε το προϊόν μακριά από παιδιά. Προσεχτείτε αποδοτικότητα

τις ακόλουθες υποδείξεις, δεδομένου ότι ενδέχεται να καταστραφεί το προϊόν και να μην καλυπτείται από την εγγύηση. Παράβλεψη αυτών των υποδείξεων ενδέχεται να προκαλέσει υαμιακές βλάβες, αλκίες ζημιές και σοβαρούς τραυματισμούς. Αποφύγετε τη λανθασμένη σύνδεση ή την αντίστροφη πολικότητα του προϊόντος. Όλα τα καλώδια και οι συνδέσεις πρέπει να είναι καλά μονωμένα. Τυχόν βραχυκυκλώματα ενδέχεται να καταστρέψουν το προϊόν. Αφαιρείτε πάντα την μπαταρία από το προϊόν ή/και αποσυνδέστε το προϊόν από την πηγή ρεύματος, όταν δεν χρησιμοποιείτε το προϊόν. Φορτίστε την μπαταρία πάντα εκτός του προϊόντος για το οποίο θέλετε να χρησιμοποιήσετε την μπαταρία. Εάν η μπαταρία είναι ελαττωματική, μπορεί να προκληθεί βλάβη στο προϊόν. Αποφύγετε το βραχυκύκλωμα, την υπερφόρτιση και την αντίστροφη πολικότητα των μπαταριών ή μεμονωμένων στοιχείων τους. Ενδέχεται να προκληθεί φωτιά ή έκρηξη. Ποτέ μην ανοίγετε μια επαναφορτιζόμενη μπαταρία, μια μπαταρία ή μεμονωμένα στοιχεία τους. Φορτίστε την μπαταρία μόνο υπό επίτηρηση. Κατά τη φόρτιση, η μπαταρία πρέπει να βρίσκεται πάνω σε μη εύφλεκτη, θερμομόχνη επιφάνεια. Εκτός αυτού, δεν επιτρέπεται να υπάρχουν εύφλεκτα ή πολύ εύφλεκτα υλικά κοντά στην μπαταρία. Μην υπερβείτε σε καμία περίπτωση το μέγιστο ρεύμα φόρτισης/εκφόρτισης που προτείνεται από την. Σε καμία περίπτωση δεν επιτρέπεται η βαθιά εκφόρτιση μιας επαναφορτιζόμενης μπαταρίας NiMH/LiPo. Η μπαταρία δεν επιτρέπεται να έρχεται σε επαφή με αλάς, νερό ή άλλα υγρά. Πραγματοποιήστε τη φόρτιση μόνο σε στεγνά, καθαρά Χρησιμοποιήστε για τη φόρτιση μπαταρία LiPo μόνο φορτιστές/εκφορτιστές που προβλέπονται από τον κατασκευαστή. Σε καμία περίπτωση μη χρησιμοποιείτε φορτιστές/εκφορτιστές NiCd/NiMH. Δεν επιτρέπεται να υποστεί ζημία το εξωτερικό της μπαταρίας LiPo. Προσεχτείτε επομένως αποδοτικότητα ώστε να μην υποστεί ζημία από ακμήρα αντικείμενα, όπως μαχαίρα, εργαλεία, ακμές από ανθρακονοίκια ή παρόμοια. Προσεχτείτε ώστε να μην υποστεί ζημία η μπαταρία από πτώση, κρούση, λυγισμό ή παρόμοιες ενέργειες. Δεν επιτρέπεται να χρησιμοποιείται πλέον η μπαταρία που είναι υποστεί ζημία. Εάν οι μπαταρίες παρουσιάζουν σημάδια παραμόρφωσης, ορατές ζημιές ή παρόμοια, δεν επιτρέπεται να τις χρησιμοποιήσετε πλέον. Ο κατασκευαστής δε φέρει ευθύνη για ζημιές που προκαλούνται λόγω παράβλεψης των υποδείξεων ασφαλείας των και προσδοκώσεων. Προσεχτείτε κατά τη φόρτιση μπαταριών LiPo, ώστε ο φορτιστής να βρίσκεται στη λειτουργία φόρτιση LiPo. Σε περίπτωση μόνιμης έντονης θέρμανσης μεμονωμένων στοιχείων της μπαταρίας, διακόψτε αμέσως τη διαδικασία φόρτισης.

## ungarisch

Nem játék. Nem alkalmas 14 évnél fiatalabb gyermekek számára. Tárolja a termékét úgy, hogy kiskorúember ne férhesen hozzá. Kitélezésen tartsa be a következő utasításokat, másképp a termék károsul és ez kizárja a garancia-igényeket. Ezen utasítások figyelem kívül hagyása esetében anyagi és személyi károk keletkezhetnek és fennáll a súlyos sérülések veszélye! Kerülje el a termék hibás csatlakoztatását vagy a polaritás felcserélését. Minden kábel és csatlakoztatás jól kell szigetelnie. A rövidzárlatokat adott esetben törölköztethetik a készülékkel. Amikor nem használja a terméket, vegye ki az akkut ill. kapcsolja le a terméket az áramforrásról. Az akkut mindig a terméken kívül töltsen fel, amelynben használja szándékolt. Ha az akku hibás, károsodhat a termék. Ne érintse az akku ill. egyes cellák rövidzárlatát, túltöltődését vagy hibás polarizációját. Ez tűzet vagy robbanást okozhat. Sohasé nyissa ki az akkút, az elemet, vagy egyes cellákat. Csak felügyeltellett töltsen fel az akkut. Töltéskor helyezze az akkut tűz- és hőálló alpra. Az akku kizárólag nem lehehetnek éghető vagy könnyen gyúlékony tárgyak. Semmi este se lépje túl a által ajánlott maximális töltés/kiütő áramot. Semmiképpen nem szabad NiMH/LiPo akkut teljesen lemeríteni. Az akku nem érinthetkezz tűzzel, vízzel, vagy más folyadékkal. Csak száraz helyiségben töltsen fel az akkut. A LiPo akkut feltöltéshez csak a megfelelő akkutpusz számára specifikált töltés-kiütő készülékkel használjon. Semmiképpen ne használjon NiCd/NiMH töltés-kiütő készülékkel. A LiPo akku külső tokját nem szabad megsértenie. Mindenképpen figyeljen tehát arra, hogy éles tárgyak, pl. kés, szerszámok, szénrészecskék stb. ne károsítsák az akkut. Figyeljen arra, hogy az akku ne károsodjon leesés, ütés, hajlítás vagy hasonló által. Hibás cellákat nem szabad tovább használni. Ha a cellákban alakváltozás, látható károsodás vagy hasonló tapaszal, ne használja tovább. A gyártó nem vállal felelősséget a biztonsági utasítások és figyelmeztetések be nem tartásából eredő meghibásodásokról. LiPo akkut töltéskor figyeljen arra, hogy a töltő LiPo töltőmodulban legyen. Ha az akkusmodogra egyes cellák töltésekor túlságosan felmelegednek, azonnal szakítsa meg a töltési folyamatot.

## türkisch

Oyuncağı değildir. 14 yaş altı çocuklar için uygun değildir. Ürünü çocukların ulaşamayacağı yerde muhafaza ediniz. Ürününüzün zarar görmesini engellemek üzere ve garanti kapsamında değerlendirilmemesi için aşağıdaki talimatları mutlaka uyunuz. Bu talimatları uymadığınız halinde can ve mal kaybına ve ağır yaralanmalara yol açabilir! Ürünün yanlış bağlanması veya ya yanlış kutuplanmasını önleyiniz. Bütün kablo ve bağlantıları iyi bir izolasyon kullanmalısınız. Kısa devreler baş koşullarda ürüne zarar verebilir. Ürününüzü kullanılmadığı zamanlar daima ürününüzden bataryayı çıkartın ve veya ürünü aynı kaynağından ayırın. Bataryayı daima hangi üründen kullanmak istiyorsanız ürünündün şarj ediniz. Batarya her anıza şarj konusu olduğunda bu, ürününen şarj görmesini neden olabilir. Bataryaya ya da müfritler hücresine kısıtlı olarak, şarj için edilmemesi ve yanlış kutuplanmasını önleyiniz. Bu bataryanın oluşturmaları ya da patlamaya yol açabilir. Asla bir bataryayı, bir pilli ya da müfritleri bir hücreye açmayınız. Bataryayı ancak denetim altında şarj ediniz. Şarj işlemi esnasında batarya yanyamayı, sıya danyamalı bir altık üzerinde bulunulmalıdır. Bunun dışında bataryanın yakınınlarda yanyayı da kulaç alevlenir nesnelere bulunulmalıdır. Tarafından yasni edilen maksimum şarj /deşarj akımı her hücre için belirlenmiştir. Batarya NiMH/LiPo bataryası hiçbir şartta aşırı deşarj edilmemelidir. Batarya este, su ya da diğer sıvıarla temas etmemelidir. Şarj işlemi sadece kurum odalarda gerçekleştirilmelidir. Bataryaları şarj edilmemesi sadece bu bataryaya tipi için özetleştirmiş şarj /deşarj cihazlarını kullanınız. Asla NiCd/NiMH şarj /deşarj cihazlarını kullanmayınız. LiPo bataryanın şarj üyüzeyi hassas görmenelidir. Bu nedenle muhakkak bıçak, aleti, karbon fiber köşelerini ya da benzeri keskin nesnelere bataryaya hasar vermesini önleyiniz. Bataryanın dikkat, vurularak, bükülerek veya benzer şekilde hasar görmemesine özen ediniz. Hasar görmüş hücreler tek kullanımlıdır. Hücrelerde şekil bozukluğu, görsel hasar ya da benzer bir durum şarj konusu ise bunları tekrar kullanmayınız. Üretici, emniyet talimatlarını ve uyarıları dikkate almamışsandan kaynaklanan hasarlarındın sorumlu tutulamaz. LiPo bataryanın şarj edilmemesi şarjın LiPo yüklemeye modunda olmasına dikkat ediniz. Müfritler hücreler batarya takımında aşırı ısınma derhal şarj işlemi kesiniz.

## tsehisch

Toto není hračka. Nevhodné pro děti do 14 let. Uchovávejte výrobek mimo dosah malých dětí. Bezpodmínečně dodržujte následující pokyny, aby nedošlo dojit k poškození výrobku a zániknutí záru-

ky. Nedodržování těchto pokynů může vést k věcným škodám a vážným zraněním osob! Využívejte se nesprávného připojení nebo záměny polů výrobku. Ušlechta připojení a kabely musejí být dobře izolovány. Zkratky mohou za určitých okolností zničit výrobek. Vždy vyjměte baterii z výrobku, resp. odpojte výrobek od zdroje proudu, když se výrobek nepoužívá. Baterii vždy nabíjete mimo výrobek, pro který chcete baterii použít. Pokud by byla baterie vadná, může dojít k poškození výrobku. Využívejte se zkratu, přebíjení a záměny polů baterie nebo jednotlivých článků. Toto může vést ke vzniku požáru nebo výbuchu. Nikdy neotevírejte baterii nebo jednotlivé články. Baterii nabíjete pouze pod dohledem. Během nabíjení musí být baterie umístěna na nehořlavé, teplostojivé podložce. Kromě toho se v blízkosti baterie nesmí nacházet zápalné hořlavé nebo snadno vznětlivé předměty. Za zádných okolností nepřekračujte maximální nabíjecí/vybíjecí proud, který je doporučen společností. Za zádných okolností nesmí být NiMH/LiPo baterie hluboce vybita. Baterie nesmí přijít do styku s ohněm, vodou nebo jinými tekutinami. Nabíjení se smí provádět pouze v suchých prostorách. K nabíjení LiPo baterii používejte pouze nabíjecí/vybíjecí které jsou určeno pro tento typ baterie. Nikdy nepoužívejte nabíjecí/vybíjecí pro NiCd/NiMH baterie. Vnější plášť LiPo baterie nesmí být poškozeny. Bezpodmínečně tedy dbejte na to, aby baterii nemohly poškodit ostře předměty, jako nože, nástroje, hrany s uhlikovými vlákny apod. Dvěte pozor, aby se baterie nepoškodila v důsledku pádu, nárazu, ohnutí apod. Poškozené články se nesmějí dále používat. Pokud by články byly zdeforovány, viditelně poškozené apod., nesmějí se už používat. Výrobce nemůže být činěn odpovědným za škody, které vznikly v důsledku nedodržování bezpečnostních pokynů a varování. Při nabíjení LiPo baterii dbejte pozor na to, aby byla nabíječka v režimu LiPo nabíjení. Při příliš silném zahřívání jednotlivých článků v baterii ihned přeručte nabíjení.

## slowenisch

NI igrača. NI primerno za otroke pod 14. letom. Proizvod hranite izvan dosega otrok. Obvezno upoštevajte izdelave opozorila, ker lahko sicer pride do uničenja proizvoda in izključitve garancije. Nedodržanje tehno pokynů může vést k věcným škodám a vážným zraněním osob! Preprečite napačno priključitve proizvoda ali priključitve v obrnjeno polariteto. Vsi kabli in povezovalne maroje biti dobro izolirani. Kratkosti stiki lahko morebiti uničijo proizvod. Koraj proizvoda ne uporabljate, vedno odstranite baterije oz. ga izklopite iz elektrike. Polnilno batario vedno polnite izven naprave, v kateri jo boste uporabili. Če je baterija poškodovana, lahko to povzroči okvaro naprave. Preprečite kratak stik, prenapenjenost in obrnjeno polariteto polnilne baterije ali posameznih celic. Slednja lahko povzroči požar ali eksplozijo. Polnilne baterije, baterije ali posamezne celice nikoli ne odpirajte. Polnilno batario nabijajte le pod nadzorom. Med polnjenjem se mora polnilna baterija nahajati na negorilni, na toploto odporni podlagi. Razen tega se v njeni bližini ne smejo nahajati gorilivi ali vroči predmeti. V nobenem primeru ne prekoračite maksimalnega polnilnega/razelikletrivnega toka, ki ga priporoča podjetje. Bezpodmínečně tedy dbejte na to, aby baterii nemohly poškodit ostře předměty, jako nože, nástroje, hrany s uhlikovými vlákny apod. Dvěte pozor, aby se baterie nepoškodila v důsledku pádu, nárazu, ohnutí apod. Poškozené články se nesmějí dále používat. Pokud by články byly zdeforovány, viditelně poškozené apod., nesmějí se už používat. Výrobce nemůže být činěn odpovědným za škody, které vznikly v důsledku nedodržování bezpečnostních pokynů a varování. Při nabíjení LiPo baterii dbejte pozor na to, aby byla nabíječka v režimu LiPo nabíjení. Při příliš silném zahřívání jednotlivých článků v baterii ihned přeručte nabíjení.

## schwedisch

Ingen leksak. Lämpar sig inte för barn under 14 år. Förvara produkten utom räckhöjd för små barn. Beakta ovillkorligen följande hänvisningar, eftersom dessa punkter kan förstå dig din produkt och ögiltiggöra garantin. När dessa hänvisningar inte beaktas kan detta leda till sak- och personskad samt allvarliga olycksfall! Undvik en felaktig anslutning eller att förväxla polerna på produkten. Alla kablar och förbindningar måste vara ordentligt isolerade. I vissa fall kan kortslutningar förstöra produkten. Ta alltid ut akumulatören ur din produkt alternativt skilj produkten från strömkäblan, när produkten inte används. Ladda alltid akumulatören utanför den produkt som du vill använda akumulatören till. Om akumulatören skulle ha en defekt, kan detta leda till att produkten skadas. Undvik att kortsluta, överladda och omkasta polerna på akumulatören eller instaka celler. Detta kan leda till att det uppstår en brand eller en explosion. Öppna aldrig en akumulatör, ett batteri eller instaka celler. Ladda akumulatören endast under övervakning. Under laddningen måste akumulatören befinna sig på ett icke brännbart, värmebeständigt underlag. Dessutom får det inte finnas några brännbara eller lätt antändliga föremål i närheten av produkten. Överskrid inte inga omständigheter laddningens maximala laddnings-/urladdningsströmmen som rekommenderas av. NiMH/LiPo-akumulatören får under inga omständigheter laddas ur komplett. Akumulatören får inte komma i kontakt med el, vatten eller andra vätskor. Genomför laddförloppet endast i torra lokaler. För att ladda LiPo-akumulatören, använd endast laddare/urladdare som har specificerats för denna typ av akumulatör. Använd i inget fall NiCd/NiMH laddare/urladdare. LiPo-akumulatörenns ytter hölje får inte skadas. Ge alltså ovillkorligen akt på att inga vassa föremål, som knivar, verktyg, kolfiberkanter eller liknande kan skada akumulatören. Ge akt på att akumulatören skadas genom att trilla ner, stötas, deformering eller liknande. Skadede celler får inte längre användas. Om cellerna skulle uppvisa deformationer, optiska skador eller liknande, så får de inte längre användas. Tillverkaren kan inte göras ansvarig för sådana skador, vilka orsakas av att säkerhetshänvisningarna och varningarna inte biföljs. När du laddar LiPo-akumulatören, ge akt på att laddaren befinner sig i LiPo-laddmodet. När värmen är alltför stark i instaka celler i akumulatörpaketet, avbryt genast laddförloppet.

## russisch

Это не игрушка. Изделие не предназначено для детей младше 14 лет. Храните изделие вне зоны досягаемости маленьких детей. Выполняйте тщательно все указания по эксплуатации. Несоблюдение этих указаний может привести к повреждению изделия и утрате права на гарантию. Несоблюдение настоящих предупреждений может привести к материальному ущербу и тяжелым травмам! Не допускайте неправильного присоединения или неправильной полярности при подключении изделия. Все кабели и соединения должны хорошо быть изолированы. Короткие замыкания могут при определенных обстоятельствах привести к выходу изделия из строя. Если изделие не используется,



