

## PRESS RELEASE

### Not all batteries are the same!

### Important information on the “heart” of electric golf trolleys

#### JuCad relies on quality and safety

As early as 2003 JuCad, the German top-class manufacturer in the high-end trolley segment, was the first supplier of modern and reliable lithium-ion batteries in the area of golf trolleys, and since then it has placed great emphasis on performance, despite its mini-light batteries that weigh only 1 kg – but above all also on safety!

Time and again in recent years we have heard of burned-down trolley halls in golf clubs – that can happen, due to unsafe and untested external battery systems, such as those that are frequently offered (more) cheaply by online suppliers. These untested and technically uncoordinated batteries present a large risk. In addition there are large differences in questions of safety and durability, but also due to many other influences, if the right action is not taken.

JuCad is aware of the safety-related issues and is rigidly implementing the complex certification of the JuCad Powerpacks. This guarantees one hundred percent safety for golfers and trolleys.

#### What you should know about batteries:

- A high-quality battery that can be transported over land, air and water – like the JuCad Powerpack – contains tested and certified batteries. All JuCad batteries are subjected to a complex procedure: the battery cells and associated electronics undergo numerous tests and are coordinated with each other. Also important: JuCad Powerpacks are certified by international transport committees and the “United Nations Economic Commission for Europe” (UNECE) in accordance with the UN transport test BU-2013-000559-UN – and thus meet all legal transport and safety requirements (these testing procedures are very costly and must be carried out anew for every battery type, which explains the higher price of safe and high-quality batteries). JuCad Powerpacks have always complied with all legal transport and safety provisions. JuCad Powerpacks have a suppressor circuit to prevent overloads and deep discharging and thus guarantee absolute safety.
- Even though JuCad batteries are housed within shockproof casings and have been made for outdoor purposes, special safety measures apply in general to every lithium-ion battery, against the following external influences:
  - **Water penetration:** The Powerpack is well protected from rain, but a “dive”, such as into a water hazard, etc., can cause damage.
  - **Extreme heat:** Not even 40 degrees in the shade can trouble the Powerpack on the round of golf. But in a car, for example, 30 degrees can rapidly become more than 70 degrees – which can shorten the lifetime of the battery in the long term.
  - **Mechanical damages:** Where there are mechanical damages to the housing, the danger is that internal short-circuits can occur, causing a hazard. The housing can be damaged by external influences (e.g. an extreme blow, fall, crushing, etc.).



Experience the JuCad world. Best quality, for a lifetime!

- Like every battery, a lithium-ion battery reaches exhaustion, depending very heavily on individual use and external conditions. The high-quality JuCad battery cells can be replaced with the proven quality.
- Installing **cheap third-party products** presents a safety risk, since neither the charging nor the control technology is coordinated with the battery cells, and non-certified batteries are frequently used. A lack of certification and no suppressor circuits represent an enormous safety risk.
- **Charging JuCad Powerpacks in several stages** does not have any negative influence on the overall lifetime of a battery. After every round of golf, irrespective of how many holes have been played, the Powerpack can be charged again immediately, and left in the accompanying JuCad charger **without any danger of an overload** – to be fully charged for the next round of golf.
- The extremely light JuCad Powerpack has a **range of up to 45 holes** – a power pack with long durability.
- **Transport on flights:** There are frequent changes to the transport regulations relating to the kilowatt-hours (kWh) that a lithium-ion battery may have. It used to be 160 kWh, at present the limit is up to 100 kWh. In addition to the standard high-performance battery, JuCad offers its customers a **flight battery set**, each with 2 x 83 kWh. That means you are always on the safe side.
- Practical: JuCad owners can borrow a **battery set for the flight!** (Only 59 Euro for up to four weeks). Advantage: only minimal costs and no duplicate battery handling.
- **New and practical: The new JuCad charge state display** for all JuCad batteries from 2003 displays the charging status of each Powerpack in five stages using LED lights. (39 Euro)

At JuCad, SAFETY is a big issue, not only in the trolleys, but also in the associated technology.

All are quality products – handmade in Germany...

[www.jucad.de](http://www.jucad.de)



Experience the JuCad world. Best quality, for a lifetime!