

THE DOC'S BATTERY & CHARGER REVIEWS

TITANIUM POWPOWER REVIEW

FEBRUARY 2005

REPORT

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TITANIUM PowPower REVIEW

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WHAT IS IN THE BOX?

The Titanium PowPower V4000 is marketed under several names, including the Lightning Pack 4000N. Out of the box comes the charging unit (one of the smallest The Doc has used) the small (but separate) power adapter and the instructions. The first picture shows the charger with the battery cover open. In the second the battery cover is closed. The black adapter on the underside of the charger allows it to be used in an Australian power outlet.



The pictures on the following page give a better view of the adapter plug. In the third picture the adapter is attached to the charger. In the fourth the adapter has been removed and is lying on the rear of the charger. The two power prongs which extrude from the back of the charger can be folded down into the charger.



USER INSTRUCTIONS

The documentation is adequate, but hardly anything to get excited about. The rating is **Satisfactory**.

CHARGER TYPE (UNIVERSAL OR MINI)

The Titanium PowPower is a mini charger. The smallest and most compact tested to date, at least for those chargers that charge 4 AA batteries at once (the Rezap 880 charged only 2 AAs).

BATTERY SIZES CATERED FOR

The Titanium PowPower only takes AA or AAA size batteries.

BATTERY TYPES CHARGED

The Titanium PowPower only charges Ni-MH and Ni-Cd batteries.

FEATURE SET

The strengths of the Titanium PowPower do not lie in the battery chemistries nor the battery sizes charged. Major features of the charger are:

- ➔ microprocessor controlled;
 - ➔ small and compact (120 grams approx.), the lightest and smallest of any charger tested to date;
 - ➔ batteries remain cool during charging. One of the better chargers in this respect;
 - ➔ the unit can discharge the battery set before charging (sometimes called conditioning the battery set). To condition you must set the switch on the back to position 1. Leaving the switch on 2 will mean the battery set is charged, but not conditioned. In picture 4 above you can clearly see the switch on the reverse side of the charger;
 - ➔ international power compatibility. The charger automatically switches between 110 volts and 240 volts, and 50 or 60 hz frequency.
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SAFETY FEATURES

The Titanium PowPower uses a combination of hardware and software controls for safety, including:

- ➔ thermal sensor which shuts down charging if overheating occurs;
- ➔ short-circuit overload protection;
- ➔ negative delta protection; and
- ➔ timer protection.

Overall the Titanium PowPower has a well rounded set of safety features.

EASE OF USE

The charger is similar in use to most mini chargers controlled by microprocessors (like the PowerBase C-T3). With the safety features you simply place the batteries in the charger and come back when the process is complete. Overall the batteries do not get very hot, but the charger is not as cool as some of the advertising would suggest, especially when marketed under the name Lightning Pack 4000N.

The only real danger will come if you insert the wrong battery type, for example Carbon Zinc (often called heavy duty batteries) or Lithium ion batteries.

One added feature of this charger is the discharge function, very useful for NiCd batteries. To operate this function you must set the switch on the reverse side to position 1.

PERFORMANCE

The Titanium PowPower is a fast charger, up to 1600 mAh in switching mode. Not bad, as the Vanson Speedy Box is only 700 mAh and the Powerbase C-T3 1100 mAh. But this figure is misleading in practice,

the charger will take approximately 3 hours to charge a 2300 mAh AA battery, which is about the same time as the Powerbase C-T3.

The discharge current is 300 mAh, which is marginally less than the Vanson Speedy Box rated at 350 mAh.

THE TITANIUM POWPOWER IN USE

It is time to get critical:

- ➔ the plastic cover on the charger is flimsy and prone to come off - often. It is easy to reattach the cover again, but it should not be coming loose in the first place;
- ➔ the negative charging contacts are a bit flimsy and cheap looking. A criticism The Doc also made of the Grandcell and DSE chargers;
- ➔ the overall construction of the charger is a little on the cheap side;
- ➔ there was anecdotal evidence that the charger did not fully charged batteries, compared to say the Vanson Speedy Box or Powerbase C-T3. So The Doc thought some rigorous testing would help determine whether this initial observation was correct. Unfortunately when the charger was plugged in The Doc heard a fizzle, and that was the end of the tests! The charger ceased working. It was not worth spending the money to replace the charger. The Doc's tests had at least highlighted that.

The Titanium PowPower has great potential. It is one of the smallest and lightest chargers available. Provided you have the correct power plug it can be used in many countries around the world. Unfortunately, it is let down by its poor quality construction. There is a question mark over reliability, but it is unfair to make a general assessment on the basis of one charger.

The Doc is often asked about buying chargers from overseas. My advice is don't underestimate local support. In this instance The Doc purchased the charger off eBay and there is no aftermarket support. So The Doc is left with a broken charger! (The things I do for this site!).

DOC'S RATING (RANKED OUT OF 10)

Feature set	8
Safety Features	8.5
Ease of use	8.5
Versatility	8.0
Value for money	7.0
Overall ranking	8
Documentation	Satisfactory

CONCLUSION

A charger that could be great if its shortcomings were addressed.

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