

## Re: Converting mains battery charger for 12v operation

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.equipment/2004-07/0437.html>

---

**From:** Tam/WB2TT (*t-tammaru\_at\_c0mca\$t.net*)

**Date:** 07/27/04

Date: Tue, 27 Jul 2004 16:12:05 -0400

Jack,

What is the nominal battery voltage? I will take a look later, but the 320VDC sounds bad. The 8.45V sounds about right for a charging voltage for a nominal 7.5V or so battery. Unregulated 8.45V would be on the low side for a charger input that charges a 6V or higher battery.

The charger for my Motorola GSM phone appears to use a switching regulator type of charger. The blob that plugs into the wall is not big or heavy enough to contain a 50/60 Hertz transformer.

Tam

"Daniel Kelly (AKA Jack)" <d.kellyNOSPAM@NOSPAM.ucl.ac.uk> wrote in message news:ce64eq\$2ldg\$1@uns-a.ucl.ac.uk...

> *Hmmm... having looked again at the PCB, I'm not so sure!*

>

> *Take a look:*

>

> [http://www.ucl.ac.uk/~ucgadak/charger\\_components.jpg](http://www.ucl.ac.uk/~ucgadak/charger_components.jpg)

> [http://www.ucl.ac.uk/~ucgadak/charger\\_merged.jpg](http://www.ucl.ac.uk/~ucgadak/charger_merged.jpg)

> [http://www.ucl.ac.uk/~ucgadak/charger\\_tracks.jpg](http://www.ucl.ac.uk/~ucgadak/charger_tracks.jpg)

>

> *I want to put 8.45v onto C22 (it's marked on the last 2 JPGs). There are*

*a*

> *total of 3 transformers. 2 of which have 240v on both sides (i.e. their*

> *coils are symetric). And there's definitely circuitry to produce 320v DC*

> *(D1 is a high voltage rectifier).*

>

> *Urg. I dunno anymore. Any thoughts?*

>

> *Thanks,*

> *Jack*

>

>

> "Daniel Kelly (AKA Jack)" <d.kellyNOSPAM@NOSPAM.ucl.ac.uk> wrote in message

> news:ce647t\$1qe8\$1@uns-a.ucl.ac.uk...

sci.electronics.equipment: Re: Converting mains battery charger for 12v operation

> > *Hiya,*  
> >  
> > *I'm 99.999% sure my charger works in way "A".*  
> >  
> > *All the control circuitry for the LiIon charging is on a little daughter*  
> > *board, which is definitely downstream of the 8*