**A homebrew FT-897 Battery**

Here some pictures of my first attempt to build an battery for my FT897.
This one has 20 NiMh cells of 3500 mA/h , size 4/3A 1.2V, (total 7 A/h) in 2 chains of 10 cells in series.
Commercial ones have 11 cells in series , but there was no place to build 2 x 11 cells in this box.
The diodes avoid discharging the other chain when one chain is broken.

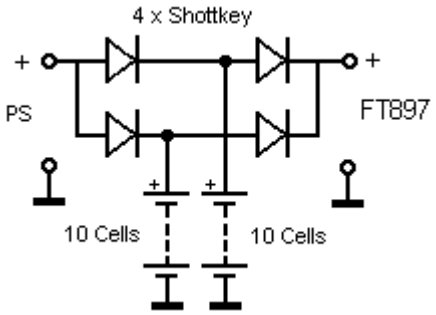


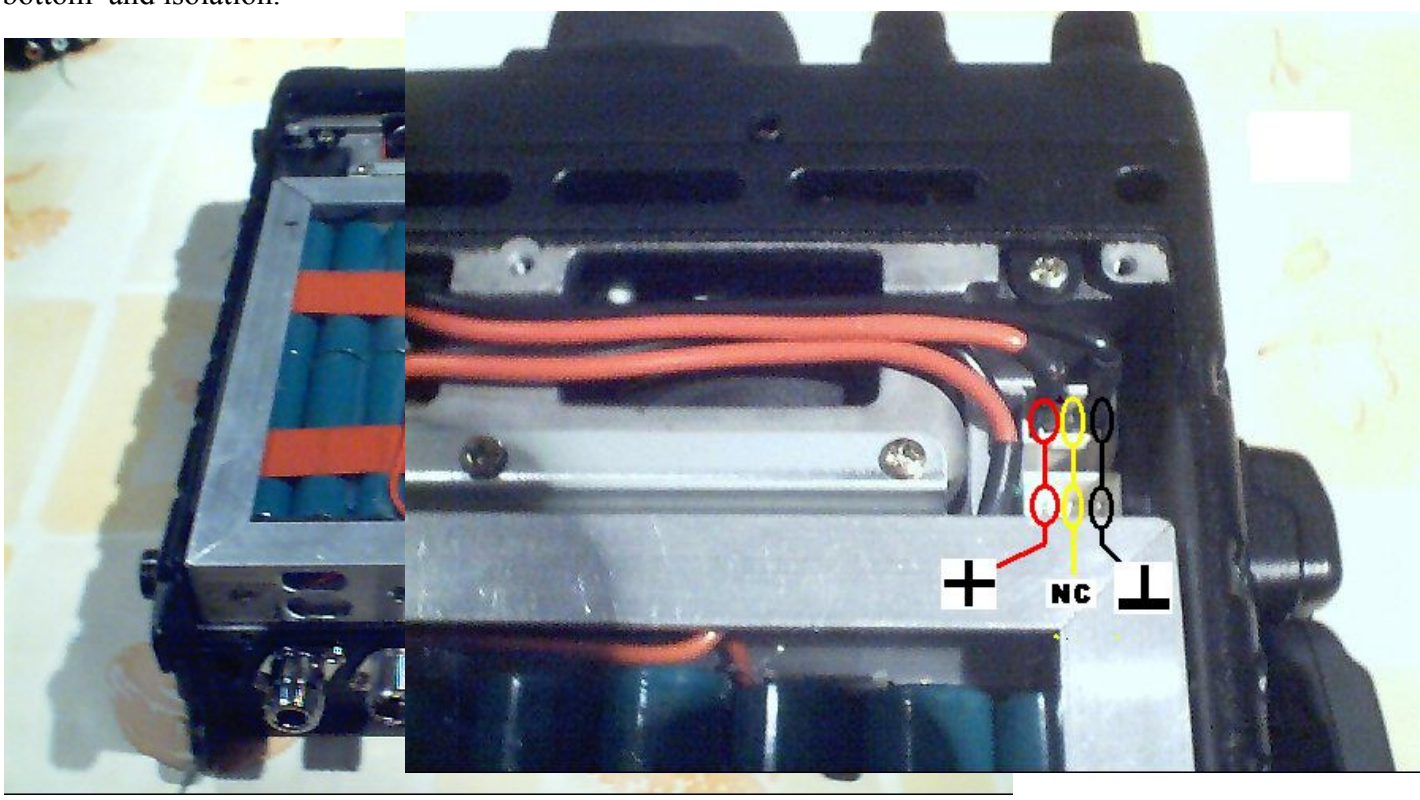
Diagram of batterypack

Use shottkey diodes of 15 Amp or more.

The loss is about 0.4 Volt / diode.


Connector for loader / PS

Do not use a pulse-loader !
With a small Power Sluppy (say 5A current limit) and 14-14.4 V out (for 2 x 10 cells) , the FT987 get his supply (via the battery ) and the battery can be loaded.
The current limit with a empty battery should be approx. 700mA (C/10 amps).
By using the battery-connector in the FT897 it switch automatically to 20 W.
For the box I did use Alu U-profile (25 mm) and plastic plate (0,5 mm thick) , cut for the top , bottom and isolation.



Battery-connector in the FT897 (NC = not connected)

So far:

1- With 10 cells in series the voltage is to low, 11 is better.
2- I did not measure the time you could use it but , I think it is about 6 hour.
3- Watch for short circuit !
For isolation small pieces of plastic you can use.
4- I advice you to add a fuse for short circuit protection.

I know that this is not a perfect design but it gives you maybe an idee how to do it.

'73 de Peter 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