

RC Cellmeter 8 Battery meter and servo tester

I have been using my present meter for some years and it is beginning to show different readings from my chargers. Time for a change. I bought a new one from eBay for £8.50. It is much the same size as the old one but it can take up to 8S lipos. As a bonus you can test servos with it. This is very handy at the field if a servo starts to behave oddly or you want to set it to neutral at 1500 μ s.

The manual is the usual one with tiny type and poor English but it is quite a simple device and with this review you will have no trouble using it.

Look at Picture 1. The word in capitals on each button is what happens with a single short press. The smaller words are what happens with a long press.



Picture 1

Photo Peter Scott

I plugged in a 3S lipo as shown in Picture 2. The default screen shows voltage and the overall percentage of charge.



Picture 2

Photo Peter Scott

TYPE button

This allows you select cell type, defaulting to LiPo.

CELL button

Pressing the CELL button repeatedly gives you the voltage of each cell. The number of the cell on display is shown at the top of the screen.

MODE button

Pressing this repeatedly gives you:

- Overall battery voltage
- Voltages of the cells
- Difference between maximum and minimum voltages of individual cells

NiMHs

I plugged in a NiMH 4.8 V pack. I got the screen shown in Picture 3. It tells you the NiMH pack voltage and the percentage charge. I am a little suspicious of the 99% shown. Even a day or so after charging the value will be below that. The voltage proved correct so perhaps the percentage is where the over-estimate is.



Picture 3

Photo Peter Scott

Using the Setup Menu

Hold down the TYPE button until it beeps

Pressing the TYPE button then steps you through the options and back to the start screen.

You can then set the following using presses on the CELL and MODE buttons to step through values (long presses for quick change):

- Voltage down to which you want discharge cells – defaults to 3.700
- Servo signal frequency. Defaults to 50H (50 hertz)
- High and low values for the servo PPM signal. Choose from 500–2500 or 1000–2000. Be careful as some servos won't tolerate the extended range.

- Then you get LEDt. This means 'LED time' or how long the screen light stays on.
- Lastly you can switch the beep on and off.
- Then you are back to the start screen.

Testing servos

Plug in the NiMH pack and servo as shown in Picture 3.
 Hold down CELL.
 Turn the wheel and watch the servo move.
 The signal is displayed in μs (shown as us).
 The bar display shows how the position of the servo.



Picture 3

Photo Peter Scott

Accuracy check

Using a high resistance multimeter

	Multimeter	Cellmeter	Out by %
3S lipo	12.39	12.42	0.25
4 cell NiMH	5.11	5.07	0.79

Good enough for me.

Discharger

You can also discharge batteries down to a chosen voltage per cell. I can't see you would want to do that at the field and all chargers have an option to do that at home. When I tried it the voltage drop was slow so this is not something I will be using.

Summary

A low cost and neat device that will be very useful at the field. This is my default tester now.

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