

Adjustment RAM UPS.

Changes.

The prototype and first PCB used 0.25W carbon resistors.

And potentiometer P2(500 Ohm en R7 1K5) was for 3.15V on both PCBs around the middle position.

Because JP3 on the first PCB was 180 degrees the wrong way around, an adjustment of the PCB was made. Also an adjustment made for 2 types of potentiometers and 0.125W resistors in the voltage sense circuit. C5 can be a 1206 SMD on the solder side or C5 can be CAP2.5 on the component side.

However, these are metal film resistors and adjusting P2 is now very difficult. So the value of P2 and R7 have been adjusted.

The best way to have P2 in the middle position at approximately the right level is to determine R7 with an extra potentiometer Px and use the set value of this Px for R7.

The {New} layouts have the option to put an R7 or Px on the PCB itself.

Adjustment procedure.

Setting the correct voltage level and turning P2 until the LED comes on does not work well.

The best way to adjust is to slowly lower the voltage and register when the LED comes on. Adjust P2 position.

Increase the voltage and press reset.

Now slowly lower the voltage again until the LED comes on.

Repeat this until P2 is in the position where the LED comes on at the correct level.

Jumper setting

J1 pin-1 <> pin-2 Connect Li cell.

Charger-1 no jumper supply current ~43mA, TL431 on consumes ~42mA.

pin-2 <> pin-3 Test charger, supply current rises to ~72mA, TL431 off consumes ~0.5mA.

Voltage on R3 ~3.6V.

J2 Li cell low voltage action.

pin-1 <> pin-2 standby voltage to RAM card off. Reformatting needed.

pin-2 <> pin-3 standby voltage to RAM card stays on. Formatting may be needed, run DISKTEST.

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Update all files for both the PCB's.