1A Float/charging Pb Acid Batt

By G8MNY (Updated Oct 05)

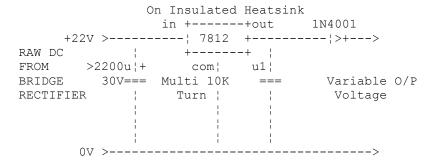
Here are 2 simply circuits for small discharge current batteries.

1/ On Insulated Heatsink in +----+out 

Voltage set by Zener + Reg - O/P diode loss. 13.5v recommended for floating Gel & sealed types. 13.8 for wet ones that can be topped up. 14.5v for charging after discharge but not left on that voltage.

Current is limited to a peak of 1A. With no I/P smoothing C there will be hum on the charging current & the battery voltage may not be suitable for floating with electronic loads. The O/P diode & lets the PNP light the LED when the diode has 0.7V across it. The diode also protects the regulator from reverse voltage is the PSU is off when connected to a live battery.

2/ Add a series R in the common leg. Most makes of regulator put about 50uAconstant current down the common leg, so a small R can uplift the voltage.



I have used this one for many years to float my packet station on a 5AH gel cell battery. Via a fused lead it powers a PacCom TNC220, a FT290Ri, & 30W PA, peak Tx current 8A, Rx 500mA leaving just 500mA to charge for the short packet Tx time.

Why Don't U send an interesting bulletin

73 De John, G8MNY @ GB7CIP

G4APL GB7CIP 8.12.2005